



**CONESTOGA-ROVERS
& ASSOCIATES**

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August 30, 2012

Reference No. 006029-50

Mr. Regan S. Williams
State Project Coordinator
Ohio EPA
Division of Emergency & Remedial Response
2110 East Aurora Road
Twinsburg, Ohio 44087

972915

Dear Mr. Williams:

Re: April 2012 Groundwater, Surface Water, and Sediment Monitoring
Summit National Superfund Site
Deerfield, Ohio

In accordance with the Consent Decree and Statement of Work (SOW) requirements for the Summit National Superfund Site (Site) in Deerfield, Ohio, the Summit National Facility Trust (SNFT) herewith submits two copies of the results of the April 2012 annual groundwater, surface water, and sediment monitoring event at the Site, in accordance with the revised monitoring schedule provided in the April 2009 Groundwater Monitoring Report [Conestoga-Rovers & Associates (CRA), September 2, 2009]. The annual groundwater, surface water, and sediment sampling was conducted on April 24, 2012. A full round of groundwater level measurements were obtained on the same day prior to commencing the sampling program.

A. GROUNDWATER QUALITY MONITORING

As proposed in the April 2009 Groundwater Monitoring Report, the following groundwater monitoring wells were sampled during the April 2012 groundwater monitoring event:

1. Water Table Unit (WTU) wells:
 - On-Site wells: MW-11, MW-107, MW-108, MW-111, MW-113
 - Off-Site downgradient wells: MW-4, MW-114, MW-115
2. Upper Intermediate Unit (UIU) wells:
 - On-Site wells: MW-207, MW-224
 - Off-Site downgradient wells: MW-209, MW-220

The samples were analyzed by Accutest Laboratories (Accutest) of Dayton, New Jersey, for the Site-Specific Indicator Parameter List (SSIPL) of compounds provided in **Table 1**.

Attachment A is a memorandum summarizing the groundwater monitoring field activities for the April 2012 groundwater monitoring event. Three of the eight WTU wells and the four UIU wells were purged dry. The fact that these wells purged dry is indicative that there is limited





**CONESTOGA-ROVERS
& ASSOCIATES**

August 30, 2012

2

Reference No. 006029-50

groundwater movement in these groundwater units. All wells recovered sufficiently for complete sample sets to be obtained.

Attachment B presents a summary of the analytical results for the detected compounds in the groundwater, surface water, and sediment samples collected in April 2012, as follows:

<i>Tables in <u>Attachment B</u></i>	<i><u>Analytical Results</u></i>
Table B.1	WTU Monitoring Wells
Table B.2	UIU Monitoring Wells
Table B.3	Surface Water
Table B.4	Sediment Sample
Table B.5	Rinse Blanks
Table B.6	Rinse Blank, Sediment
Table B.7	Field Blank, Surface Water
Table B.8	Trip Blank

CRA's data quality assessment for the April 2012 analyses is included in **Attachment C**. The groundwater data was determined to be usable without qualifications.

A summary of the SSIPL compounds detected within the WTU and UIU groundwater samples during the sampling events conducted in 2004 (baseline), 2009 (first 5-year event after shutdown of the groundwater extraction system), and 2010 to 2012 are presented on the attached **Figures 1** and **2**, respectively. Concentration trends in the WTU and UIU are discussed below.

WTU Trends – On-Site Wells (MW-11, MW-107, MW-108, MW-111, MW-113)

At MW-11, the concentrations of the SSIPL compounds were similar to or trending down compared to the 2011 concentrations (see **Figure 1**) and were lower than the concentrations in 2004 (baseline). At MW-107, the concentrations of the SSIPL compounds were similar to or trending up or down compared to the 2011 concentrations (see **Figure 1**) and were lower than the concentrations in 2004 (baseline), except for 1,1-Dichloroethane, benzene, ethylbenzene and xylene. At MW-108, MW-111 and MW-113, the concentrations of the SSIPL compounds were similar to or trending up compared to the 2011 concentrations (see **Figure 1**) and were lower than the concentrations in 2004 (baseline). At MW-108, the concentrations of the SSIPL compounds were higher than the concentrations in 2004 (baseline). At MW-111 and MW-113, the concentrations of the SSIPL compounds were similar to or lower than the concentrations in 2004 (baseline).



**CONESTOGA-ROVERS
& ASSOCIATES**

August 30, 2012

3

Reference No. 006029-50

A summary comparison of changes from the 2011 groundwater monitoring results for detected volatile organic compounds (VOCs) in the on-Site WTU wells is provided below:

Well ID	Parameters	2011	2012	MCL (µg/L)	Increase/ Decrease
MW-11	1,1,1-Trichloroethane	28.1	24.4	200	↓
	1,1-Dichloroethane	63.4	63.3	-	↓
	1,2-Dichloroethane	1.2	1.3	5	↑
	Benzene	0.61 J	0.55 J	5	--
	cis-1,2-Dichloroethene	50.7	44.2	70	↓
	trans-1,2-Dichloroethene	1.9	1.6	100	↓
	Trichloroethene	95.9	75.6	5	↓
	Vinyl Chloride	6.1	4.1	2	↓
MW-107	1,1,1-Trichloroethane	57.9	57.1	200	↓
	1,1-Dichloroethane	1060	1610	-	↑
	1,2-Dichloroethane	157	210	5	↑
	Benzene	82.3	89.1	5	↑
	Chlorobenzene	54.2	51.9	100	↓
	cis-1,2-Dichloroethene	270	208	70	↓
	Ethylbenzene	989	907	700	↓
	Toluene	4040	1510	1,000	↓
	trans-1,2-Dichloroethene	ND (10)	2.7 J	100	--
	Trichloroethene	4.5 J	5.1	5	↑
MW-108	Vinyl Chloride	76.3	142	2	↑
	Xylenes, Total	3220	3320	10,000	↑
	1,1,1-Trichloroethane	5.3/6.0	6.1	200	↑
	1,1-Dichloroethane	200/234	329	-	↑
	1,2-Dichloroethane	59.0/62.0	68.5	5	↑
	Benzene	91.7/98.6	120	5	↑
	cis-1,2-Dichloroethene	144/156	199	70	↑
	Ethylbenzene	0.58 J/0.63 J	0.81 J	700	--
	Toluene	0.73 J/0.83 J	1.1	1,000	↑
	trans-1,2-Dichloroethene	3.9/4.5	5.8	100	↑



**CONESTOGA-ROVERS
& ASSOCIATES**

August 30, 2012

4

Reference No. 006029-50

Well ID	Parameters	2011	2012	MCL (µg/L)	Increase/Decrease
MW-108 (cont'd)	Trichloroethene	25.7/28.8	31.0	5	↑
	Vinyl Chloride	61.2/69.5	119	2	↑
	Xylenes, Total	ND (1.0)/ND (1.0)	0.32 J	10,000	--
MW-111	1,1,1-Trichloroethane	1.1	1.6	200	↑
	1,1-Dichloroethane	21.1	32.2	-	↑
	1,2-Dichloroethane	44.5	73.7	5	↑
	Chloroethane	0.88 J	1.2	-	↑
	cis-1,2-Dichloroethene	4.9	6.3	70	↑
	Vinyl Chloride	3.3	6.2	2	↑
MW-113	Acetone	ND (10)	5.9	-	↑

Note: "J" indicates an estimated result below the reporting limit

Overall, the SSIPL concentrations in on-Site WTU wells in 2012 are less than the baseline (2004) concentrations. Minor fluctuations in concentrations occurred between 2011 and 2012 (both increasing and decreasing). The changes measured were within historical ranges. Minor fluctuations in concentrations are expected in the on-Site WTU wells because of their location near former waste disposal. Variations in water table position, slight changes in flow pathways and natural attenuation will result in the fluctuations noted.

WTU Trends – Off-Site Wells (MW-4, MW-114, MW-115)

Concentrations of the SSIPL compounds at MW-4 and MW-114 were non-detect for the 2011 and 2012 sampling events (see Figure 1), which is consistent with the 2004 (baseline) sampling event and later sampling events. At MW-115, low concentrations of 1,1-Dichloroethane (1,1-DCA) and cis-1,2-Dichloroethene (cis-1,2-DCE) were similar to the 2010 and 2011 concentrations and remain within the range of concentrations detected since 2004. A summary comparison of changes from the 2011 groundwater monitoring results for detected VOC compounds in off-Site WTU well MW-115 is provided below:

Well ID	Parameters	2011	2012	MCL (µg/L)	Increase/Decrease
MW-115	1,1-Dichloroethane	1.7	2.0	-	↑
	cis-1,2-Dichloroethene	7.0	7.4	70	↑



**CONESTOGA-ROVERS
& ASSOCIATES**

August 30, 2012

5

Reference No. 006029-50

UIU Trends – On-Site Wells (MW-207, W-224)

SSIPL compounds were non-detect in the on-Site UIU wells sampled in 2012, which is consistent with the eight previous sampling events (see **Figure 2**).

UIU Trends – Off-Site Wells (MW-209, W-220)

SSIPL compounds were non-detect in the off-Site UIU wells sampled in 2012 (see **Figure 2**). Acetone, which has previously been detected at select monitoring UIU wells, was not detected in the 2011 or 2012 samples.

Acetone Trends

Past Ohio Environmental Protection Agency (OEPA) comments inquired about possible trends in acetone concentrations; therefore, a summary of the acetone monitoring and trends is provided herein. Because acetone is a common laboratory contaminant, it is often reported at estimated values in environmental samples due to background contamination in the laboratory rather than actual presence of the compound in samples.

Acetone is a SSIPL compound that has previously been detected in two on-Site WTU wells (MW-108, MW-113) and in two downgradient off-Site UIU wells (MW-209, MW-220). These four wells are located in the vicinity of the eastern property boundary. Many of the past detections were estimated results (J-values) below the reporting limit and the four wells did not have detections of acetone every year.

Table D.1 (Attachment D) summarizes the acetone concentrations from 2004 to 2012 for MW-108, MW-113, MW-209, and MW-220. Results indicate minor fluctuations, but no increasing or decreasing trends from year to year. Of the four wells, acetone was only detected at MW-113 for the 2012 sampling event. SNFT does not believe that there is an increasing trend in acetone concentrations in these wells, but will continue to monitor them annually for acetone.

Note that the United States Environmental Protection Agency (USEPA) Regional Screening Level (RSL) for acetone in tap water is 22,000 µg/L, which is significantly higher than the detected concentrations.

B. GROUNDWATER HYDRAULIC MONITORING

Groundwater levels in the WTU, UIU, Lower Intermediate Unit (LIU), and Upper Sharon Unit (USU) monitoring wells and piezometers at the Site were measured on April 24, 2012 and are presented in **Attachment E**. **Table E.1 (Attachment E)** lists the groundwater levels measured in the monitoring wells since 2004 (the year prior to shutdown of the groundwater extraction and treatment system). The groundwater hydraulic data was reduced to elevations and entered



August 30, 2012

6

Reference No. 006029-50

into a computer database as required by the SOW. Groundwater contours for the April 2012 groundwater hydraulic monitoring event are presented in the figures in **Attachment E**.

The groundwater elevation contours for the April 2012 hydraulic monitoring demonstrate that the horizontal direction of groundwater flow is generally southeasterly in the WTU, as it has been consistently observed in the past. The groundwater flow direction in the UIU bedrock unit appears to be in a generally easterly direction and is consistent with the pre-shutdown groundwater flow direction in this unit.

C. SURFACE WATER AND SEDIMENT SAMPLING

The annual surface water and sediment samples were collected from the confluence of the south and east drainage ditches on April 24, 2012, and analyzed for TCL VOCs and TCL SVOCs. The analytical results of the surface water sample are provided in **Table B.3** of **Attachment B**. The analytical results of the sediment sample are provided in **Table B.4** of **Attachment B**. CRA's data quality assessment for the April 2012 analyses is included in **Attachment C**.

Four VOCs were detected at very low levels in the 2012 surface water sample: 1,1-DCA; 1,2-DCA; cis-1,2-DCE; and TCE with all of these, except cis-1,2-DCE, reported at estimated concentrations. Acetone was ND(5.0), which is consistent with previous results at this location. There are no increasing concentration trends of the four detected compounds in the surface water samples from 2004 to 2012. **Table F.1 (Attachment F)** provides a summary of the VOCs detected in the surface water samples from 2004 to 2012. A summary comparison of changes from the 2011 surface water samples results for detected VOC compounds is provided below and shows no significant changes:

Parameters	2011	2012	MCL (µg/L)	Increase/Decrease
1,1-Dichloroethane	ND (1.0)/ND (1.0)	0.24 J/0.25 J	-	--
1,2-Dichloroethane	ND (1.0)/ND (1.0)	ND (1.0)/0.28 J	5	--
cis-1,2-Dichloroethene	1.2/1.1	1.7/1.8	70	↑
Trichloroethene	0.35 J/0.33 J	0.45 J/0.49 J	5	--

Note: "J" indicates an estimated result below the reporting limit

No semi-volatile organic compounds (SVOCs) have been detected in the surface water samples from 2004 to 2012.

One VOC (TCE) was detected in the 2012 sediment sample at an estimated concentration below the reporting limit. Acetone was ND(26/23), which is consistent with previous results at this



August 30, 2012

7

Reference No. 006029-50

location. A summary comparison of changes from the 2011 sediment samples results for detected VOC compounds is provided below:

Parameters	2011	2012	MCL (µg/L)	Increase/Decrease
Trichloroethene (TCE)	ND (12)/1.5	0.68 J/ND (12)	5	--

Note: "J" indicates an estimated result below the reporting limit

Table F.2 (Attachment F) contains a summary of the analytical results of the detected compounds in the sediment sample collected April 2012. **Table F.2** also includes the June 2011 United States Environmental Protection Agency (USEPA) Regional Screening Levels for Residential and Industrial soil for Chemical Contaminants at Superfund Sites, as well as the mean background soil concentrations from the Record of Decision (USEPA, June 30, 1998). CRA's data quality assessment for the April 2012 analyses is included in **Attachment C**.

Compounds detected in the 2012 sediment sample are primarily SVOCs associated with the past coal mining in the area of the site and were detected at concentrations below the USEPA Screening Level for Industrial and Residential Soil and are at or below the mean background soil concentration identified in the Record of Decision.

D. DISCUSSION

Except for the expected increase in groundwater elevations in the vicinity of the pipe and media drain after shutdown of the groundwater extraction system in August 2005, no significant changes in the groundwater flow patterns have been noted since the system shutdown. Groundwater concentrations in downgradient off-Site monitoring wells have remained either non-detect or similar to the concentrations detected since 2004 (baseline sampling event for the shutdown evaluation). The increasing concentration trend at on-Site monitoring well MW-108 was extensively evaluated in the 2009 groundwater monitoring report (CRA, September 2, 2009). This evaluation concluded that there was evidence of increasing parameter concentration during the post-shutdown period relative to earlier contaminant levels, but the detected compounds did not show signs of migration beyond the Site boundaries, and concentration increases appeared to be contained inside the Site. The 2012 analytical data indicate an increase in SSIPL concentrations at this well; however, the detected compounds appear to be well-contained inside the Site boundary.

The contingency actions outlined in the April 2009 Groundwater Monitoring Report (CRA, September 2, 2009), as amended in the Responses to the OEPA January 6, 2010 Comments (CRA, March 26, 2010) are as follows:



**CONESTOGA-ROVERS
& ASSOCIATES**

August 30, 2012

8

Reference No. 006029-50

"If VOCs above their respective maximum contaminant level (MCL) are detected in the Sentinel wells (off-Site downgradient WTU monitoring wells MW-114 and MW-115), SNFT will evaluate options to mitigate the release (e.g., restart the groundwater extraction system, implement in-situ chemical oxidation (ISCO) to treat the released groundwater, phytoremediation, etc.). The Sentinel wells are located 70 to 80 feet south of the southern property boundary and wet well of the pipe and media drain. During pumping of groundwater from the pipe and media drain, the WTU zone of groundwater capture extends 100 to 200 feet south of the pipe and media drain at the wet well. In this case, off-Site downgradient WTU monitoring wells MW-116, MW-117 and MW-118 (approximately 230 feet south of the southern property boundary) will be used to verify whether there is any long term impact to the groundwater south of the Site and outside the influence of the pipe and media drain".

As there continue to be no VOC detections at sentinel well MW-114 and the concentrations for the two VOCs detected at sentinel well MW-115 are consistent with past events and below their MCLs, no contingency actions are required based on the April 2012 groundwater monitoring data, and therefore, the groundwater extraction system will remain off, pending the results of the 2013 groundwater sampling event.

Considering the consistent groundwater flow directions in the LIU and the USU based on 18 years of groundwater hydraulic monitoring at the Site, SNFT requests that the hydraulic monitoring frequency of these units be changed from annual hydraulic monitoring to hydraulic monitoring once every 5 years (during the 5-year expanded groundwater monitoring events). Annual hydraulic monitoring of the WTU and UIU will continue.

Should you have any questions or require additional information, please do not hesitate to contact the undersigned.

Yours truly,

CONESTOGA-ROVERS & ASSOCIATES, INC.

A handwritten signature in black ink, appearing to read "Nicholas J. Schapman".

Nicholas J. Schapman

NS/po/WILL-02
Encl.



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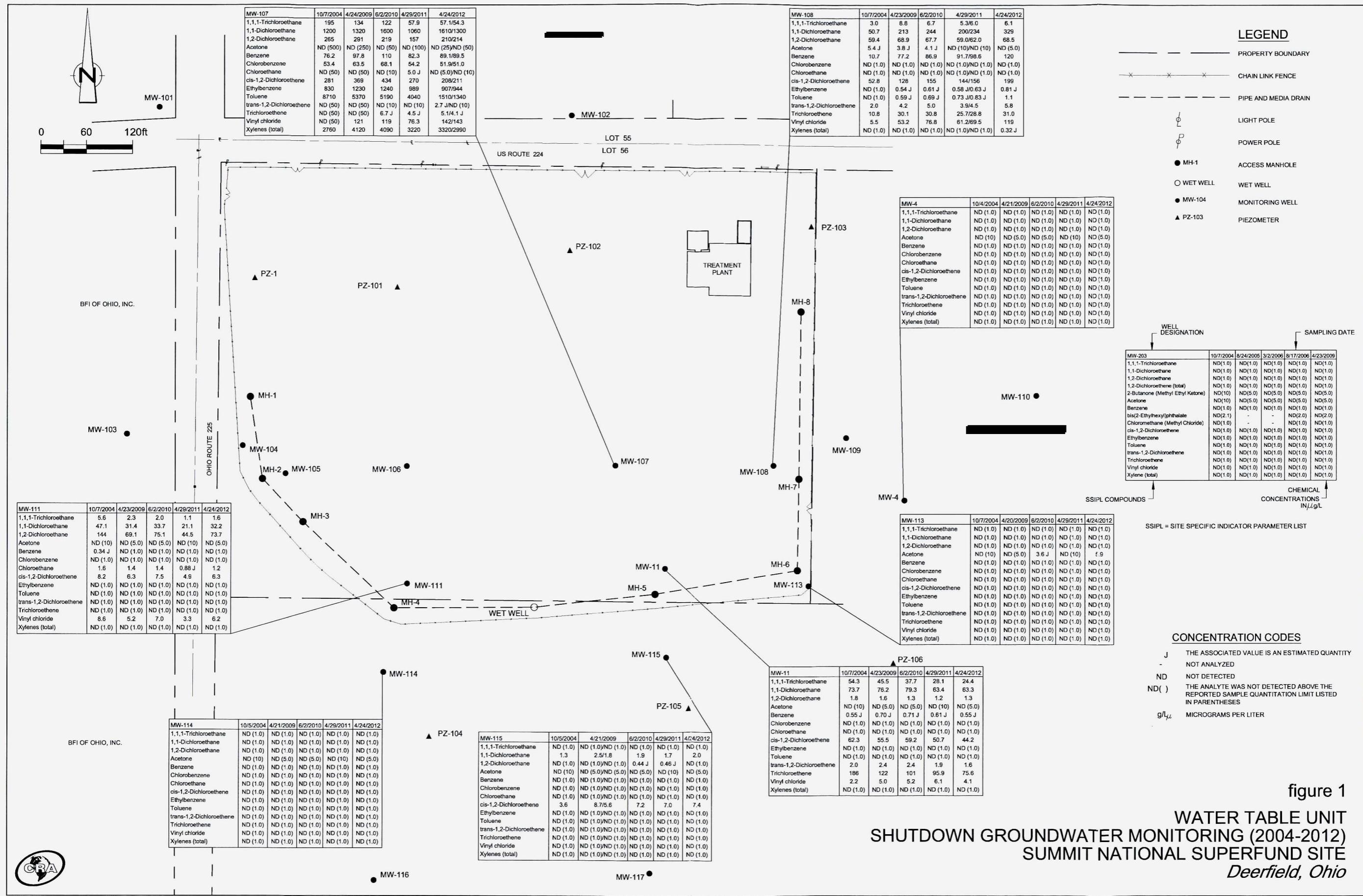
August 30, 2012

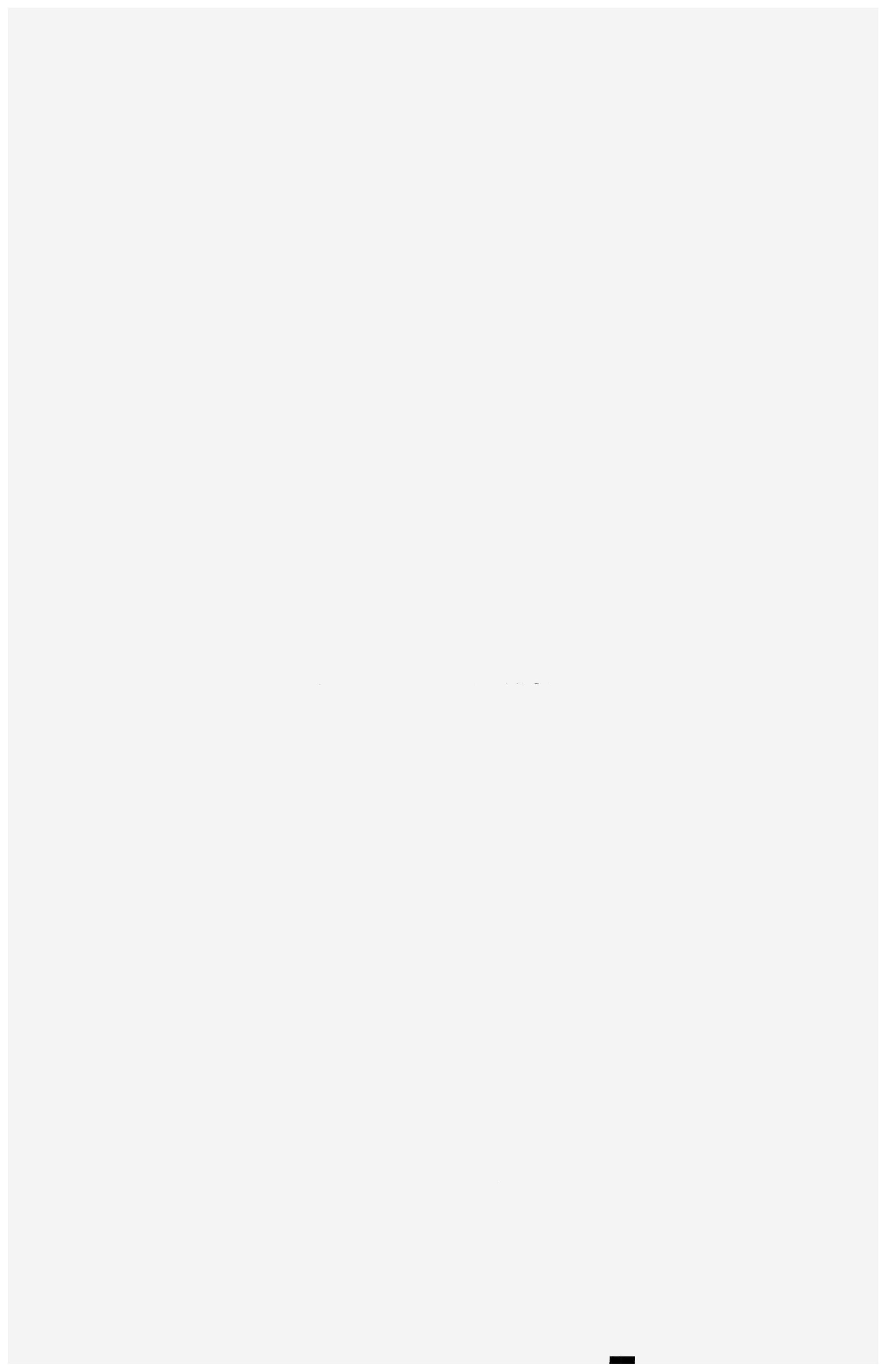
9

Reference No. 006029-50

cc: **Pablo Valentin, USEPA (2 hardcopies, 1 e-copy)**
Robert Casselberry, SNFT (1 hardcopy, 1 e-copy)
Jeff Sussman, SNFT (1 hardcopy, 1 e-copy)
Joe Montello, SNFT (1 hardcopy, 1 e-copy)
Douglas G. Haynam, Shumaker, Loop & Kendrick, LLP (e-copy)
Jack Michels, CRA (e-copy)
Steve Whillier, CRA (e-copy)
Mike Mateyk, CRA (e-copy)
Debbie Brennan, CRA (e-copy, text only)

FIGURES





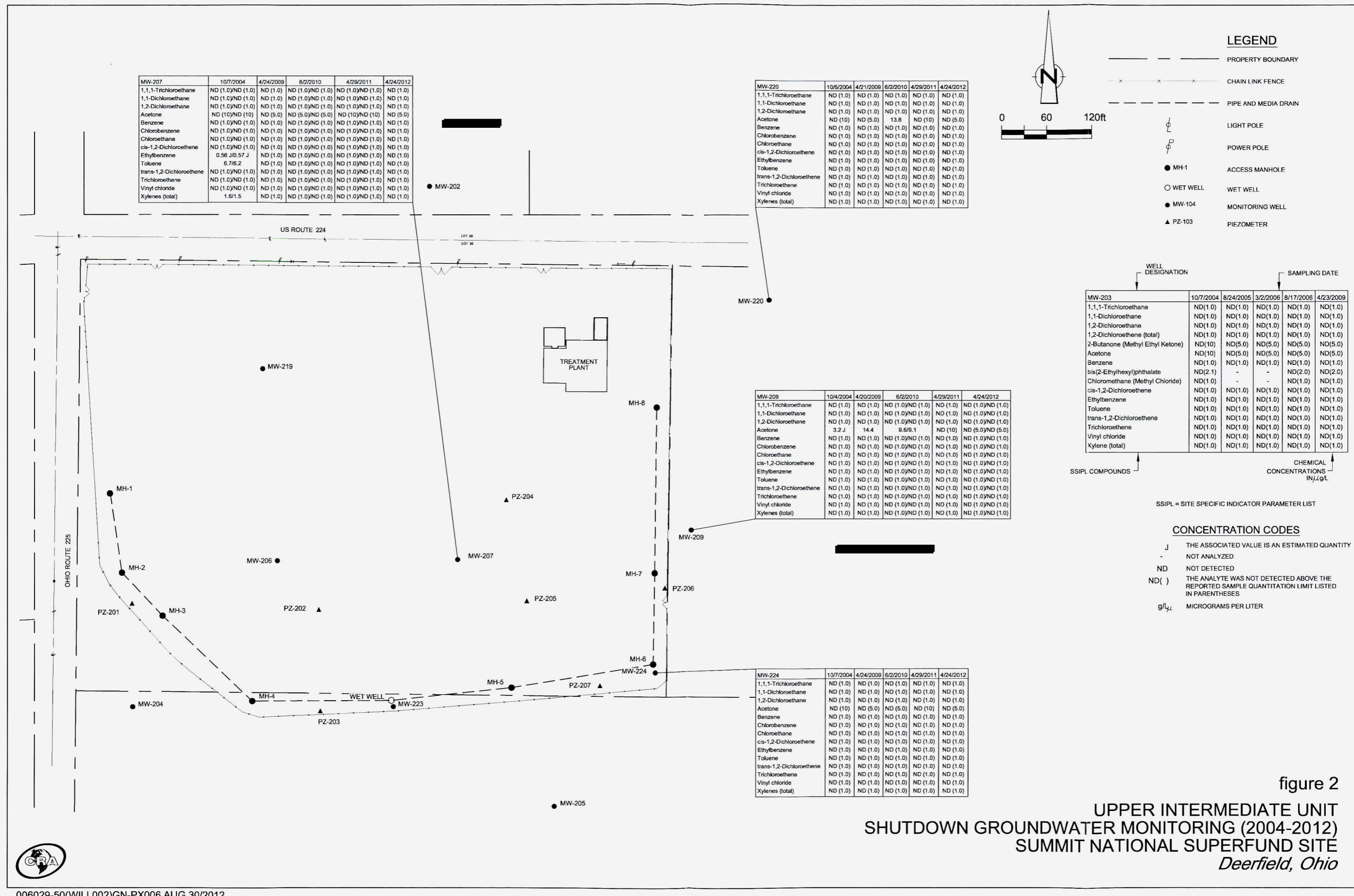


TABLE 1
SITE-SPECIFIC INDICATOR PARAMETER LIST (2010 – 2013)
SUMMIT NATIONAL SUPERFUND SITE
DEERFIELD, OHIO

Volatile Organic Compounds (VOCs)

1,1,1-Trichloroethane (1,1,1-TCA)
1,1-Dichloroethane (1,1-DCA)
1,2-Dichloroethane (1,2-DCA)
cis-1,2-Dichloroethene (cis-1,2-DCE)
trans-1,2-Dichloroethene (trans-1,2-DCE)
Acetone
Benzene
Chlorobenzene
Chloroethane
Ethylbenzene
Toluene
Trichloroethene (TCE)
Vinyl Chloride (VC)
Xylenes, Total

ATTACHMENT A

GROUNDWATER MONITORING FIELD ACTIVITIES SUMMARY



**CONESTOGA-ROVERS
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MEMORANDUM

Sent via email

TO: Nicholas Schapman

REF. NO.: 006029-50

David Tyran

FROM: David Tyran/adh/4

DATE: May 8, 2012

Rev. June 28, 2012

Rev. June 29, 2012

Rev. July 20, 2012

C.C.: Stephen Whillier, Nate Ziegler

RE: Post Shutdown Hydraulic Monitoring and Groundwater Quality Monitoring

April 2012

Summit National Superfund Site

Deerfield Township of Portage County, Ohio

The following is a brief summary of the Site activities associated with the April 2012 round of groundwater sampling conducted on April 24, 2012 at the Summit National Superfund Site (Site) in Deerfield Township of Portage County, Ohio.

On-Site Personnel

Field activities were conducted by Conestoga-Rovers & Associates' (CRA's) Shawn Gardner and Dave Tyran.

Water Levels

A round of water level readings was taken from the on-Site and off-Site monitoring wells on April 24, 2012, using a Solinst electronic water level tape. The water level tape was decontaminated between water level measurements at each monitoring well. The decontamination sequence involved first rinsing the tape with potable water and final rinsing with deionized water.

Purging and Sampling of Monitoring Wells

During purging of the monitoring wells, readings of specific conductivity, temperature, and turbidity (dependent on field observations) were taken after the removal of each standing well volume. A summary of the well purge data is provided in Table 1. The quality of the evacuated water was also noted for color and clarity. Purge waters (approximately 115 gallons) from the monitoring wells were containerized in three steel 55-gallon drums, which were sampled and then closed up. The drums will be disposed of off Site at a later date.

Once the monitoring wells were purged, groundwater samples were collected for analyses of the Site-Specific Indicator Parameter List (SSIPL).

Twelve monitoring wells were purged using either dedicated Waterra foot valves and tubing or an electric Grundfos submersible pump. The wells were sampled using a precleaned stainless steel bailer (as detailed below) or Teflon bailer. Once purging of the monitoring well was completed, the tubing was removed from the well and drained. The standing water within the well was allowed to settle so that a clear sample could be collected. After sampling of the well was completed, the tubing was placed back down the well.

As shown in Table 1, seven out of the twelve wells were purged dry and then allowed to recover so a complete sample set could be taken. The remaining five wells had sufficient recharge to allow for stabilization by purging three or more volumes.

Collected samples were labeled and placed in a cooler and maintained cool with ice. The samples were shipped by Federal Express to Accutest Laboratories in Dayton, New Jersey, under Chain of Custody protocols.

Decontamination Procedures

Stainless steel bailers were cleaned between monitoring wells by using the following decontamination sequence:

- i) Clean with brush in potable water and Alconox detergent
- ii) Rinse thoroughly with potable water
- iii) Rinse thoroughly with deionized water
- iv) Allow the bailer to air dry on clean aluminum foil

Field Quality Assurance/Quality Control (QA/QC) Program

Field QA/QC samples collected during the April 2012 round of groundwater sampling included two blind field duplicates and two stainless steel bailer rinsate blanks. Two matrix spike and matrix spike duplicates (MS/MSDs) were also collected. In addition, one field blank was collected for the surface water sample as well as a rinsate blank on the sediment sampling equipment. One trip blank was sent with the shipment of samples to the laboratory by placing the VOC samples in the same cooler with the trip blank.

Stainless steel bailer rinsate blanks were collected by pouring lab supplied deionized water into a precleaned bailer and then filling the sample containers.

The surface water field blank was obtained by pouring lab supplied deionized water directly into labeled sample bottles while standing next to the surface water sample location.

The sediment sample rinsate blank was obtained by pouring lab-supplied deionized water into a decontaminated stainless steel bowl and then filling the sample containers.

Surface Water

A surface water sample was collected at the confluence of the south and east ditches. This sample was collected by dipping labeled sample bottles below the surface of the water at the approximate confluence point. The sample was analyzed for TCL VOCs and TCL SVOCs.

Sediment Sample

This sample was obtained by scooping up sediments with a gloved hand at the approximate confluence point of the south and east ditches. The sediment was placed in a stainless steel bowl and homogenized before placing it into labeled sample jars.

Prior to homogenization, the VOC portion of the sample was taken utilizing Encore low level samplers. The sediment sample was analyzed for TCL VOCs and TCL SVOCs.

Damaged Well

It was noted during the water level round that monitoring well MW-4 had been damaged. It appeared that several tires had been stacked over the pro-casing and wooden bollards and then set on fire. The resulting heat on the pro-casing and steel riser inside caused the plastic J-plug and ½-inch diameter polyethylene purge tubing to melt and form a hard plug over the riser. The mass of melted plastic had adhered so strongly to the riser, it was necessary to use a 6-foot wrecking bar to lever it out of the way making it possible to get a water level and then sample the well. It was difficult to tell how much, if any, melted plastic ended up down in the well itself.

TABLE 1

Page 1 of 2

**SUMMARY OF MONITORING WELL PURGE DATA
SUMMIT NATIONAL SUPERFUND SITE
DEERFIELD TOWNSHIP OF PORTAGE COUNTY, OHIO
APRIL 2012**

<i>Well I.D.</i>	<i>Date Purged/ Sampled</i>	<i>Well Volume (Gallons)</i>	<i>Purged Volume (Gallons)</i>	<i>Time</i>	<i>Conductivity (ms/cm)</i>	<i>pH</i>	<i>Temperature (°C)</i>	<i>Turbidity (NTU)</i>	<i>Water Quality</i>	<i>Purge/Sampling Method</i>	<i>Comments</i>
MW-4	04/24/12	11.5	11.5	17:10	2.79	6.68	10.25	30.1	Clear, colorless	Grundfos/SS bailer	Well dry @ 1 vol
	04/24/12		Sample	20:25					Clear, colorless	for all parameters	
MW-11	04/24/12	2.7	2.7	11:37	2.28	7.01	9.55	26.2	Clear, colorless	Waterra/Teflon bailer	Good recharge
			5.4	11:43	2.13	7.00	9.19	54.8	Clear, colorless	for all parameters	
			8.1	11:52	2.15	6.94	9.53	5.97	Clear, colorless		
			Sample	15:45					Clear, colorless		
MW-107	04/24/12	3.2	3.2	12:20	2.64	6.94	11.10	22.5	Clear, colorless - strong chemical odor	Waterra/SS bailer	Good recharge
			6.4	12:27	2.66	6.91	10.59	13.7	Clear, colorless - strong chemical odor	for all parameters	
			9.6	12:34	2.68	6.92	11.30	6.19	Clear, colorless - strong chemical odor		
			Sample	15:55					Clear, colorless - strong chemical odor		
MW-108	04/24/12	2.0	2.0	11:20	1.80	6.84	9.05	277	Cloudy, light gray	Waterra/SS bailer	Good recharge
			4.0	11:22	1.81	6.79	9.16	223	Cloudy, light gray	for all parameters	
			6.0	11:23	1.83	6.79	9.20	97.9	Slightly cloudy, light gray		
			Sample	15:35					Cloudy, red brown		
MW-111	04/24/12	2.5	2.5	13:15	3.75	6.04	11.38	15.2	Clear, colorless	Waterra/SS bailer	Good recharge
			5.0	13:19	3.75	6.01	11.18	7.92	Clear, colorless	for all parameters	
			7.5	13:22	3.74	5.99	11.06	4.62	Clear, colorless		
			Sample	16:05					Slightly cloudy, light brown		
MW-113	04/24/12	1.5	1.5	11:06	3.41	6.88	9.15	84.5	Cloudy gray	Waterra/SS bailer	Well dry @ 4 gallons
			3.0	11:10	3.49	7.01	8.95	315	Cloudy gray	for all parameters	
			Sample	15:15					Clear, colorless		
MW-114	04/24/12	2.0	2.0	14:00	2.58	6.79	10.00	203	Cloudy, light brown	Waterra/SS bailer	Well dry @ 4.5 gallons
			4.0	14:03	2.80	6.15	10.43	45.9	Slight cloudy, light brown	for all parameters	
			Sample	20:45					Cloudy, red brown		

TABLE 1

Page 2 of 2

**SUMMARY OF MONITORING WELL PURGE DATA
SUMMIT NATIONAL SUPERFUND SITE
DEERFIELD TOWNSHIP OF PORTAGE COUNTY, OHIO
APRIL 2012**

Well I.D.	Date Purged/ Sampled	Well Volume (Gallons)	Purged Volume (Gallons)	Time	Conductivity (ms/cm)	pH	Temperature (°C)	Turbidity (NTU)	Water Quality	Purge/Sampling Method	Comments
MW-115	04/24/12	3.8	3.8	13:45	2.28	6.56	11.35	24.1	Clear, colorless	Grundfos/SS bailer	Good recharge
			7.6	13:47	2.31	6.60	11.29	2.72	Clear, colorless	for all parameters	
			11.4	13:49	2.32	6.63	11.33	0.85	Clear, colorless		
			Sample	20:35					Slightly cloudy, brown		
MW-207	04/24/12	6.2	6.2	12:49	3.22	7.19	11.21	69.0	Cloudy, dark gray	Grundfos/SS bailer	Well dry @ 18.4 gallons
			12.4	12:52	3.25	6.99	11.38	86.1	Cloudy, dark gray	for all parameters	
			Sample	21:35					Clear, colorless		
MW-209	04/24/12	5.1	5.1	17:27	3.11	6.71	10.57	53.3	Cloudy, brown	Grundfos/SS bailer	Well dry @ 6 gallons
			Sample	21:05					Clear, colorless		
MW-220	04/24/12	4.8	4.8	16:51	3.75	6.75	11.47	17.8	Slight cloudy, light brown	Grundfos/SS bailer	Well dry @ 6.5 gallons
			Sample	20:55					Slight cloudy, light gray		
MW-224	04/24/12	3.8	3.8	17:42	2.62	7.25	10.97	38.2	Clear, colorless	Grundfos/SS bailer	Well dry @ 8.8 gallons
			7.6	17:44	3.77	6.97	11.37	26.6	Clear, colorless	for all parameters	
			Sample	21:25					Clear, colorless		
Surface Water	04/24/12		Sample	18:30	1.350	7.86	11.79	9.38	Clear, colorless	Grab sample	
Sediment	04/24/12		Sample	19:15						Grab sample	

Notes:

NM - Not measured.
 SS - Stainless Steel.

ATTACHMENT B

ANALYTICAL DATA SUMMARY

TABLE OF CONTENTS

TABLE B.1	ANALYTICAL DATA SUMMARY-WTU MONITORING WELLS	B-1
TABLE B.2	ANALYTICAL DATA SUMMARY- UIU MONITORING WELLS	B-2
TABLE B.3	ANALYTICAL DATA SUMMARY- SURFACE WATER SAMPLE	B-3
TABLE B.4	ANALYTICAL DATA SUMMARY- SEDIMENT SAMPLE	B-4
TABLE B.5	ANALYTICAL DATA SUMMARY- RINSE BLANKS	B-5
TABLE B.6	ANALYTICAL DATA SUMMARY- RINSE BLANK, SEDIMENT	B-6
TABLE B.7	ANALYTICAL DATA SUMMARY- FIELD BLANK, SURFACE WATER	B-7
TABLE B.8	ANALYTICAL DATA SUMMARY- TRIP BLANK	B-8

TABLE B.1

**ANALYTICAL DATA SUMMARY
WTU MONITORING WELLS
APRIL 2012 GROUNDWATER MONITORING EVENT
SUMMIT NATIONAL SUPERFUND SITE
DEERFIELD, OHIO**

<i>Sample Location:</i>	<i>MW-4</i>	<i>MW-11</i>	<i>MW-107</i>	<i>MW-107</i>	<i>MW-108</i>	<i>MW-111</i>	<i>MW-113</i>	<i>MW-114</i>	<i>MW-115</i>
<i>Sample ID:</i>	WG-6029-042412-015	WG-6029-042412-004	WG-6029-042412-002	WG-6029-042412-005	WG-6029-042412-003	WG-6029-042412-006	WG-6029-042412-001	WG-6029-042412-017	WG-6029-042412-016
<i>Sample Date:</i>	4/24/2012	4/24/2012	4/24/2012	4/24/2012	4/24/2012	4/24/2012	4/24/2012	4/24/2012	4/24/2012
<i>Duplicate</i>									
<i>Parameters</i>	<i>Units</i>								
<i>Volatile Organic Compounds</i>									
1,1,1-Trichloroethane	ug/L	ND (1.0)	24.4	54.3	57.1	6.1	1.6	ND (1.0)	ND (1.0)
1,1-Dichloroethane	ug/L	ND (1.0)	63.3	1300	1610	329	32.2	ND (1.0)	ND (1.0)
1,2-Dichloroethane	ug/L	ND (1.0)	1.3	214	210	68.5	73.7	ND (1.0)	ND (1.0)
Acetone	ug/L	ND (5.0)	ND (5.0)	ND (25)	ND (5.0)	ND (5.0)	5.9	ND (5.0)	ND (5.0)
Benzene	ug/L	ND (1.0)	0.55 J	89.5	89.1	120	ND (1.0)	ND (1.0)	ND (1.0)
Chlorobenzene	ug/L	ND (1.0)	ND (1.0)	51.0	51.9	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)
Chloroethane	ug/L	ND (1.0)	ND (1.0)	ND (10)	ND (5.0)	ND (1.0)	1.2	ND (1.0)	ND (1.0)
cis-1,2-Dichloroethene	ug/L	ND (1.0)	44.2	211	208	199	6.3	ND (1.0)	ND (1.0)
Ethylbenzene	ug/L	ND (1.0)	ND (1.0)	944	907	0.81 J	ND (1.0)	ND (1.0)	ND (1.0)
Toluene	ug/L	ND (1.0)	ND (1.0)	1340	1510	1.1	ND (1.0)	ND (1.0)	ND (1.0)
trans-1,2-Dichloroethene	ug/L	ND (1.0)	1.6	ND (10)	2.7 J	5.8	ND (1.0)	ND (1.0)	ND (1.0)
Trichloroethene	ug/L	ND (1.0)	75.6	4.1 J	5.1	31.0	ND (1.0)	ND (1.0)	ND (1.0)
Vinyl chloride	ug/L	ND (1.0)	4.1	143	142	119	6.2	ND (1.0)	ND (1.0)
Xylenes (total)	ug/L	ND (1.0)	ND (1.0)	2990	3320	0.32 J	ND (1.0)	ND (1.0)	ND (1.0)

TABLE B.2

Page 1 of 1

**ANALYTICAL DATA SUMMARY
UIU MONITORING WELLS
APRIL 2012 GROUNDWATER MONITORING EVENT
SUMMIT NATIONAL SUPERFUND SITE
DEERFIELD, OHIO**

<i>Sample Location:</i>	<i>MW-207</i>	<i>MW-209</i>	<i>MW-209</i>	<i>MW-220</i>	<i>MW-224</i>
<i>Sample ID:</i>	WG-6029-042412-022	WG-6029-042412-019	WG-6029-042412-020	WG-6029-042412-018	WG-6029-042412-021
<i>Sample Date:</i>	4/24/2012	4/24/2012	4/24/2012	4/24/2012	4/24/2012
<i>Parameters</i>	<i>Duplicate</i>				
<i>Volatile Organic Compounds</i>	<i>Units</i>				
1,1,1-Trichloroethane	ug/L	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)
1,1-Dichloroethane	ug/L	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)
1,2-Dichloroethane	ug/L	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)
Acetone	ug/L	ND (5.0)	ND (5.0)	ND (5.0)	ND (5.0)
Benzene	ug/L	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)
Chlorobenzene	ug/L	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)
Chloroethane	ug/L	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)
cis-1,2-Dichloroethene	ug/L	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)
Ethylbenzene	ug/L	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)
Toluene	ug/L	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)
trans-1,2-Dichloroethene	ug/L	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)
Trichloroethene	ug/L	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)
Vinyl chloride	ug/L	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)
Xylenes (total)	ug/L	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)

TABLE B.3

Page 1 of 2

**ANALYTICAL DATA SUMMARY
SURFACE WATER SAMPLE
APRIL 2012 GROUNDWATER MONITORING EVENT
SUMMIT NATIONAL SUPERFUND SITE
DEERFIELD, OHIO**

<i>Sample Location:</i>	<i>S&E Ditches</i>	<i>Sediment</i>	<i>S&E Ditches</i>	<i>Sediment</i>
<i>Sample ID:</i>	WS-6029-042412-008		WS-6029-042412-009	
<i>Sample Date:</i>	4/24/2012		4/24/2012	
				<i>Duplicate</i>
<i>Parameters</i>	<i>Units</i>			
Volatile Organic Compounds				
1,1,1-Trichloroethane	ug/L	ND (1.0)	ND (1.0)	
1,1,2,2-Tetrachloroethane	ug/L	ND (1.0)	ND (1.0)	
1,1,2-Trichloroethane	ug/L	ND (1.0)	ND (1.0)	
1,1-Dichloroethane	ug/L	0.24 J	0.25 J	
1,1-Dichloroethene	ug/L	ND (1.0)	ND (1.0)	
1,2-Dichloroethane	ug/L	ND (1.0)	0.28 J	
1,2-Dichloroethene (total)	ug/L	1.7	1.8	
1,2-Dichloropropane	ug/L	ND (1.0)	ND (1.0)	
2-Butanone (Methyl ethyl ketone) (MEK)	ug/L	ND (5.0)	ND (5.0)	
2-Hexanone	ug/L	ND (5.0)	ND (5.0)	
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	ug/L	ND (5.0)	ND (5.0)	
Acetone	ug/L	ND (5.0)	ND (5.0)	
Benzene	ug/L	ND (1.0)	ND (1.0)	
Bromodichloromethane	ug/L	ND (1.0)	ND (1.0)	
Bromoform	ug/L	ND (4.0)	ND (4.0)	
Bromomethane (Methyl bromide)	ug/L	ND (2.0)	ND (2.0)	
Carbon disulfide	ug/L	ND (2.0)	ND (2.0)	
Carbon tetrachloride	ug/L	ND (1.0)	ND (1.0)	
Chlorobenzene	ug/L	ND (1.0)	ND (1.0)	
Chloroethane	ug/L	ND (1.0)	ND (1.0)	
Chloroform (Trichloromethane)	ug/L	ND (1.0)	ND (1.0)	
Chloromethane (Methyl chloride)	ug/L	ND (1.0)	ND (1.0)	
cis-1,2-Dichloroethene	ug/L	1.7	1.8	
cis-1,3-Dichloropropene	ug/L	ND (1.0)	ND (1.0)	
Dibromochloromethane	ug/L	ND (1.0)	ND (1.0)	
Ethylbenzene	ug/L	ND (1.0)	ND (1.0)	
Methylene chloride	ug/L	ND (2.0)	ND (2.0)	
Styrene	ug/L	ND (5.0)	ND (5.0)	
Tetrachloroethene	ug/L	ND (1.0)	ND (1.0)	
Toluene	ug/L	ND (1.0)	ND (1.0)	
trans-1,2-Dichloroethene	ug/L	ND (1.0)	ND (1.0)	
trans-1,3-Dichloropropene	ug/L	ND (1.0)	ND (1.0)	
Trichloroethene	ug/L	0.45 J	0.49 J	
Vinyl chloride	ug/L	ND (1.0)	ND (1.0)	
Xylenes (total)	ug/L	ND (1.0)	ND (1.0)	
Semivolatile Organic Compounds				
1,2,4-Trichlorobenzene	ug/L	ND (1.0)	ND (1.0)	
1,2-Dichlorobenzene	ug/L	ND (1.0)	ND (1.0)	
1,3-Dichlorobenzene	ug/L	ND (1.0)	ND (1.0)	
1,4-Dichlorobenzene	ug/L	ND (1.0)	ND (1.0)	
2,2'-Oxybis(1-chloropropane) (bis(2-Chloroisopropyl) ether)	ug/L	ND (2.0)	ND (2.0)	
2,4,5-Trichlorophenol	ug/L	ND (5.0)	ND (5.0)	
2,4,6-Trichlorophenol	ug/L	ND (5.0)	ND (5.0)	
2,4-Dichlorophenol	ug/L	ND (5.0)	ND (5.0)	
2,4-Dimethylphenol	ug/L	ND (5.0)	ND (5.0)	
2,4-Dinitrophenol	ug/L	ND (20)	ND (20)	
2,4-Dinitrotoluene	ug/L	ND (2.0)	ND (2.0)	
2,6-Dinitrotoluene	ug/L	ND (2.0)	ND (2.0)	
2-Chloronaphthalene	ug/L	ND (2.0)	ND (2.0)	
2-Chlorophenol	ug/L	ND (5.0)	ND (5.0)	
2-Methylnaphthalene	ug/L	ND (1.0)	ND (1.0)	
2-Methylphenol	ug/L	ND (2.0)	ND (2.0)	

TABLE B.3

Page 2 of 2

**ANALYTICAL DATA SUMMARY
SURFACE WATER SAMPLE
APRIL 2012 GROUNDWATER MONITORING EVENT
SUMMIT NATIONAL SUPERFUND SITE
DEERFIELD, OHIO**

<i>Sample Location:</i>	<i>S&E Ditches Sediment</i>	<i>S&E Ditches Sediment</i>
<i>Sample ID:</i>	WS-6029-042412-008	WS-6029-042412-009
<i>Sample Date:</i>	4/24/2012	4/24/2012
		<i>Duplicate</i>
<i>Parameters</i>	<i>Units</i>	
2-Nitroaniline	ug/L	ND (5.0)
2-Nitrophenol	ug/L	ND (5.0)
3&4-Methylphenol	ug/L	ND (2.0)
3,3'-Dichlorobenzidine	ug/L	ND (5.0)
3-Nitroaniline	ug/L	ND (5.0)
4,6-Dinitro-2-methylphenol	ug/L	ND (20)
4-Bromophenyl phenyl ether	ug/L	ND (2.0)
4-Chloro-3-methylphenol	ug/L	ND (5.0)
4-Chloroaniline	ug/L	ND (5.0)
4-Chlorophenyl phenyl ether	ug/L	ND (2.0)
4-Nitroaniline	ug/L	ND (5.0)
4-Nitrophenol	ug/L	ND (10)
Acenaphthene	ug/L	ND (1.0)
Acenaphthylene	ug/L	ND (1.0)
Anthracene	ug/L	ND (1.0)
Benzo(a)anthracene	ug/L	ND (1.0)
Benzo(a)pyrene	ug/L	ND (1.0)
Benzo(b)fluoranthene	ug/L	ND (1.0)
Benzo(g,h,i)perylene	ug/L	ND (1.0)
Benzo(k)fluoranthene	ug/L	ND (1.0)
bis(2-Chloroethoxy)methane	ug/L	ND (2.0)
bis(2-Chloroethyl)ether	ug/L	ND (2.0)
bis(2-Ethylhexyl)phthalate (DEHP)	ug/L	ND (2.0)
Butyl benzylphthalate (BBP)	ug/L	ND (2.0)
Carbazole	ug/L	ND (1.0)
Chrysene	ug/L	ND (1.0)
Dibenz(a,h)anthracene	ug/L	ND (1.0)
Dibenzofuran	ug/L	ND (5.0)
Diethyl phthalate	ug/L	ND (2.0)
Dimethyl phthalate	ug/L	ND (2.0)
Di-n-butylphthalate (DBP)	ug/L	ND (2.0)
Di-n-octyl phthalate (DnOP)	ug/L	ND (2.0)
Fluoranthene	ug/L	ND (1.0)
Fluorene	ug/L	ND (1.0)
Hexachlorobenzene	ug/L	ND (1.0)
Hexachlorobutadiene	ug/L	ND (1.0)
Hexachlorocyclopentadiene	ug/L	ND (10)
Hexachloroethane	ug/L	ND (2.0)
Indeno(1,2,3-cd)pyrene	ug/L	ND (1.0)
Isophorone	ug/L	ND (2.0)
Naphthalene	ug/L	ND (1.0)
Nitrobenzene	ug/L	ND (2.0)
N-Nitrosodi-n-propylamine	ug/L	ND (2.0)
N-Nitrosodiphenylamine	ug/L	ND (5.0)
Pentachlorophenol	ug/L	ND (10)
Phenanthrene	ug/L	ND (1.0)
Phenol	ug/L	ND (2.0)
Pyrene	ug/L	ND (1.0)

TABLE B.4

Page 1 of 2

**ANALYTICAL DATA SUMMARY
SEDIMENT SAMPLE
APRIL 2012 GROUNDWATER MONITORING EVENT
SUMMIT NATIONAL SUPERFUND SITE
DEERFIELD, OHIO**

<i>Sample Location:</i>	<i>S&E Ditches Sediment</i>	<i>S&E Ditches Sediment</i>
<i>Sample ID:</i>	SE-6029-042412-012	SE-6029-042412-013
<i>Sample Date:</i>	4/24/2012	4/24/2012
<i>Parameters</i>	<i>Units</i>	
<i>Volatile Organic Compounds</i>		
1,1,1-Trichloroethane	ug/kg	ND (13)
1,1,2,2-Tetrachloroethane	ug/kg	ND (13)
1,1,2-Trichloroethane	ug/kg	ND (13)
1,1-Dichloroethane	ug/kg	ND (13)
1,1-Dichloroethene	ug/kg	ND (13)
1,2-Dichloroethane	ug/kg	ND (2.6)
1,2-Dichloroethene (total)	ug/kg	ND (13)
1,2-Dichloropropane	ug/kg	ND (13)
2-Butanone (Methyl ethyl ketone) (MEK)	ug/kg	ND (26)
2-Hexanone	ug/kg	ND (13)
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	ug/kg	ND (13)
Acetone	ug/kg	ND (26)
Benzene	ug/kg	ND (2.6)
Bromodichloromethane	ug/kg	ND (13)
Bromoform	ug/kg	ND (13)
Bromomethane (Methyl bromide)	ug/kg	ND (13)
Carbon disulfide	ug/kg	ND (13)
Carbon tetrachloride	ug/kg	ND (13)
Chlorobenzene	ug/kg	ND (13)
Chloroethane	ug/kg	ND (13)
Chloroform (Trichloromethane)	ug/kg	ND (13)
Chloromethane (Methyl chloride)	ug/kg	ND (13)
cis-1,2-Dichloroethene	ug/kg	ND (13)
cis-1,3-Dichloropropene	ug/kg	ND (13)
Dibromochloromethane	ug/kg	ND (13)
Ethylbenzene	ug/kg	ND (2.6)
Methylene chloride	ug/kg	ND (13)
Styrene	ug/kg	ND (13)
Tetrachloroethene	ug/kg	ND (13)
Toluene	ug/kg	ND (2.6)
trans-1,2-Dichloroethene	ug/kg	ND (13)
trans-1,3-Dichloropropene	ug/kg	ND (13)
Trichloroethene	ug/kg	0.68 J
Vinyl chloride	ug/kg	ND (13)
Xylenes (total)	ug/kg	ND (2.6)
<i>Semivolatile Organic Compounds</i>		
1,2,4-Trichlorobenzene	ug/kg	ND (130)
1,2-Dichlorobenzene	ug/kg	ND (130)
1,3-Dichlorobenzene	ug/kg	ND (130)
1,4-Dichlorobenzene	ug/kg	ND (130)
2,2'-Oxybis(1-chloropropane) (bis(2-Chloroisopropyl) ether)	ug/kg	ND (130)
2,4,5-Trichlorophenol	ug/kg	ND (320)
2,4,6-Trichlorophenol	ug/kg	ND (320)
2,4-Dichlorophenol	ug/kg	ND (320)
2,4-Dimethylphenol	ug/kg	ND (320)
2,4-Dinitrophenol	ug/kg	ND (1300)
2,4-Dinitrotoluene	ug/kg	ND (130)
2,6-Dinitrotoluene	ug/kg	ND (130)
2-Chloronaphthalene	ug/kg	ND (130)
2-Chlorophenol	ug/kg	ND (320)
2-Methylnaphthalene	ug/kg	62.0 J
2-Methylphenol	ug/kg	ND (130)

TABLE B.4

Page 2 of 2

**ANALYTICAL DATA SUMMARY
SEDIMENT SAMPLE
APRIL 2012 GROUNDWATER MONITORING EVENT
SUMMIT NATIONAL SUPERFUND SITE
DEERFIELD, OHIO**

<i>Sample Location:</i>	<i>S&E Ditches Sediment</i>	<i>S&E Ditches Sediment</i>
<i>Sample ID:</i>	SE-6029-042412-012	SE-6029-042412-013
<i>Sample Date:</i>	4/24/2012	4/24/2012
<i>Parameters</i>		
2-Nitroaniline	ug/kg	ND (320)
2-Nitrophenol	ug/kg	ND (320)
3&4-Methylphenol	ug/kg	ND (130)
3,3'-Dichlorobenzidine	ug/kg	ND (320)
3-Nitroaniline	ug/kg	ND (320)
4,6-Dinitro-2-methylphenol	ug/kg	ND (1300)
4-Bromophenyl phenyl ether	ug/kg	ND (130)
4-Chloro-3-methylphenol	ug/kg	ND (320)
4-Chloroaniline	ug/kg	ND (320)
4-Chlorophenyl phenyl ether	ug/kg	ND (130)
4-Nitroaniline	ug/kg	ND (320)
4-Nitrophenol	ug/kg	ND (640)
Acenaphthene	ug/kg	ND (64)
Acenaphthylene	ug/kg	ND (64)
Anthracene	ug/kg	ND (64)
Benzo(a)anthracene	ug/kg	ND (64)
Benzo(a)pyrene	ug/kg	ND (64)
Benzo(b)fluoranthene	ug/kg	ND (64)
Benzo(g,h,i)perylene	ug/kg	ND (64)
Benzo(k)fluoranthene	ug/kg	ND (64)
bis(2-Chloroethoxy)methane	ug/kg	ND (130)
bis(2-Chloroethyl)ether	ug/kg	ND (130)
bis(2-Ethylhexyl)phthalate (DEHP)	ug/kg	ND (130)
Butyl benzylphthalate (BBP)	ug/kg	ND (130)
Carbazole	ug/kg	ND (130)
Chrysene	ug/kg	ND (64)
Dibenz(a,h)anthracene	ug/kg	ND (64)
Dibenzofuran	ug/kg	ND (130)
Diethyl phthalate	ug/kg	ND (130)
Dimethyl phthalate	ug/kg	173
Di-n-butylphthalate (DBP)	ug/kg	ND (130)
Di-n-octyl phthalate (DnOP)	ug/kg	ND (130)
Fluoranthene	ug/kg	ND (64)
Fluorene	ug/kg	ND (64)
Hexachlorobenzene	ug/kg	ND (130)
Hexachlorobutadiene	ug/kg	ND (64)
Hexachlorocyclopentadiene	ug/kg	ND (640)
Hexachloroethane	ug/kg	ND (320)
Indeno(1,2,3-cd)pyrene	ug/kg	ND (64)
Isophorone	ug/kg	ND (130)
Naphthalene	ug/kg	42.1 J
Nitrobenzene	ug/kg	ND (130)
N-Nitrosodi-n-propylamine	ug/kg	ND (130)
N-Nitrosodiphenylamine	ug/kg	ND (320)
Pentachlorophenol	ug/kg	ND (640)
Phenanthrene	ug/kg	41.6 J
Phenol	ug/kg	ND (130)
Pyrene	ug/kg	ND (64)
<i>General Chemistry</i>		
Total solids	%	44.7
		47.4

TABLE B.5

Page 1 of 1

**ANALYTICAL DATA SUMMARY
RINSE BLANKS
APRIL 2012 GROUNDWATER MONITORING EVENT
SUMMIT NATIONAL SUPERFUND SITE
DEERFIELD, OHIO**

<i>Sample Location:</i>	<i>Rinse Blank</i>	<i>Rinse Blank</i>
<i>Sample ID:</i>	RB-6029-042412-007	RB-6029-042412-014
<i>Sample Date:</i>	4/24/2012	4/24/2012
<i>Parameters</i>	<i>Units</i>	
<i>Volatile Organic Compounds</i>		
1,1,1-Trichloroethane	ug/L	ND (1.0)
1,1-Dichloroethane	ug/L	ND (1.0)
1,2-Dichloroethane	ug/L	ND (1.0)
Acetone	ug/L	ND (5.0)
Benzene	ug/L	ND (1.0)
Chlorobenzene	ug/L	ND (1.0)
Chloroethane	ug/L	ND (1.0)
cis-1,2-Dichloroethene	ug/L	ND (1.0)
Ethylbenzene	ug/L	ND (1.0)
Toluene	ug/L	ND (1.0)
trans-1,2-Dichloroethene	ug/L	ND (1.0)
Trichloroethene	ug/L	ND (1.0)
Vinyl chloride	ug/L	ND (1.0)
Xylenes (total)	ug/L	ND (1.0)

TABLE B.6

Page 1 of 2

**ANALYTICAL DATA SUMMARY
RINSE BLANK - SEDIMENT
2012 GROUNDWATER MONITORING EVENT
SUMMIT NATIONAL SUPERFUND SITE
DEERFIELD, OHIO**

<i>Sample Location:</i>	<i>Rinse Blank</i>	
<i>Sample ID:</i>	RB-6029-042412-011	
<i>Sample Date:</i>	4/24/2012	
<i>Parameters</i>		<i>Units</i>
Volatile Organic Compounds		
1,1,1-Trichloroethane	ug/L	ND (1.0)
1,1,2,2-Tetrachloroethane	ug/L	ND (1.0)
1,1,2-Trichloroethane	ug/L	ND (1.0)
1,1-Dichloroethane	ug/L	ND (1.0)
1,1-Dichloroethene	ug/L	ND (1.0)
1,2-Dichloroethane	ug/L	ND (1.0)
1,2-Dichloroethene (total)	ug/L	ND (1.0)
1,2-Dichloropropane	ug/L	ND (1.0)
2-Butanone (Methyl ethyl ketone) (MEK)	ug/L	ND (5.0)
2-Hexanone	ug/L	ND (5.0)
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	ug/L	ND (5.0)
Acetone	ug/L	ND (5.0)
Benzene	ug/L	ND (1.0)
Bromodichloromethane	ug/L	ND (1.0)
Bromoform	ug/L	ND (4.0)
Bromomethane (Methyl bromide)	ug/L	ND (2.0)
Carbon disulfide	ug/L	ND (2.0)
Carbon tetrachloride	ug/L	ND (1.0)
Chlorobenzene	ug/L	ND (1.0)
Chloroethane	ug/L	ND (1.0)
Chloroform (Trichloromethane)	ug/L	ND (1.0)
Chloromethane (Methyl chloride)	ug/L	ND (1.0)
cis-1,2-Dichloroethene	ug/L	ND (1.0)
cis-1,3-Dichloropropene	ug/L	ND (1.0)
Dibromochloromethane	ug/L	ND (1.0)
Ethylbenzene	ug/L	ND (1.0)
Methylene chloride	ug/L	ND (2.0)
Styrene	ug/L	ND (5.0)
Tetrachloroethene	ug/L	ND (1.0)
Toluene	ug/L	ND (1.0)
trans-1,2-Dichloroethene	ug/L	ND (1.0)
trans-1,3-Dichloropropene	ug/L	ND (1.0)
Trichloroethene	ug/L	ND (1.0)
Vinyl chloride	ug/L	ND (1.0)
Xylenes (total)	ug/L	ND (1.0)
Semivolatile Organic Compounds		
1,2,4-Trichlorobenzene	ug/L	ND (1.0)
1,2-Dichlorobenzene	ug/L	ND (1.0)
1,3-Dichlorobenzene	ug/L	ND (1.0)
1,4-Dichlorobenzene	ug/L	ND (1.0)
2,2'-Oxybis(1-chloropropane) (bis(2-Chloroisopropyl) ether)	ug/L	ND (2.0)
2,4,5-Trichlorophenol	ug/L	ND (5.0)
2,4,6-Trichlorophenol	ug/L	ND (5.0)
2,4-Dichlorophenol	ug/L	ND (5.0)
2,4-Dimethylphenol	ug/L	ND (5.0)
2,4-Dinitrophenol	ug/L	ND (20)
2,4-Dinitrotoluene	ug/L	ND (2.0)
2,6-Dinitrotoluene	ug/L	ND (2.0)
2-Chloronaphthalene	ug/L	ND (2.0)
2-Chlorophenol	ug/L	ND (5.0)
2-Methylnaphthalene	ug/L	ND (1.0)
2-Methylphenol	ug/L	ND (2.0)

TABLE B.6

Page 2 of 2

**ANALYTICAL DATA SUMMARY
RINSE BLANK - SEDIMENT
2012 GROUNDWATER MONITORING EVENT
SUMMIT NATIONAL SUPERFUND SITE
DEERFIELD, OHIO**

<i>Sample Location:</i>	<i>Rinse Blank</i>	
<i>Sample ID:</i>	RB-6029-042412-011	
<i>Sample Date:</i>	4/24/2012	
<i>Parameters</i>	<i>Units</i>	
2-Nitroaniline	ug/L	ND (5.0)
2-Nitrophenol	ug/L	ND (5.0)
3&4-Methylphenol	ug/L	ND (2.0)
3,3'-Dichlorobenzidine	ug/L	ND (5.0)
3-Nitroaniline	ug/L	ND (5.0)
4,6-Dinitro-2-methylphenol	ug/L	ND (20)
4-Bromophenyl phenyl ether	ug/L	ND (2.0)
4-Chloro-3-methylphenol	ug/L	ND (5.0)
4-Chloroaniline	ug/L	ND (5.0)
4-Chlorophenyl phenyl ether	ug/L	ND (2.0)
4-Nitroaniline	ug/L	ND (5.0)
4-Nitrophenol	ug/L	ND (10)
Acenaphthene	ug/L	ND (1.0)
Acenaphthylene	ug/L	ND (1.0)
Anthracene	ug/L	ND (1.0)
Benzo(a)anthracene	ug/L	ND (1.0)
Benzo(a)pyrene	ug/L	ND (1.0)
Benzo(b)fluoranthene	ug/L	ND (1.0)
Benzo(g,h,i)perylene	ug/L	ND (1.0)
Benzo(k)fluoranthene	ug/L	ND (1.0)
bis(2-Chloroethoxy)methane	ug/L	ND (2.0)
bis(2-Chloroethyl)ether	ug/L	ND (2.0)
bis(2-Ethylhexyl)phthalate (DEHP)	ug/L	ND (2.0)
Butyl benzylphthalate (BBP)	ug/L	ND (2.0)
Carbazole	ug/L	ND (1.0)
Chrysene	ug/L	ND (1.0)
Dibenz(a,h)anthracene	ug/L	ND (1.0)
Dibenzo furan	ug/L	ND (5.0)
Diethyl phthalate	ug/L	ND (2.0)
Dimethyl phthalate	ug/L	ND (2.0)
Di-n-butylphthalate (DBP)	ug/L	ND (2.0)
Di-n-octyl phthalate (DnOP)	ug/L	ND (2.0)
Fluoranthene	ug/L	ND (1.0)
Fluorene	ug/L	ND (1.0)
Hexachlorobenzene	ug/L	ND (1.0)
Hexachlorobutadiene	ug/L	ND (1.0)
Hexachlorocyclopentadiene	ug/L	ND (10)
Hexachloroethane	ug/L	ND (2.0)
Indeno(1,2,3-cd)pyrene	ug/L	ND (1.0)
Isophorone	ug/L	ND (2.0)
Naphthalene	ug/L	ND (1.0)
Nitrobenzene	ug/L	ND (2.0)
N-Nitrosodi-n-propylamine	ug/L	ND (2.0)
N-Nitrosodiphenylamine	ug/L	ND (5.0)
Pentachlorophenol	ug/L	ND (10)
Phenanthrene	ug/L	ND (1.0)
Phenol	ug/L	ND (2.0)
Pyrene	ug/L	ND (1.0)

TABLE B.7

Page 1 of 2

**ANALYTICAL DATA SUMMARY
FIELD BLANK - SURFACE WATER
2012 GROUNDWATER MONITORING EVENT
SUMMIT NATIONAL SUPERFUND SITE
DEERFIELD, OHIO**

<i>Sample Location:</i>	<i>Field Blank</i>	
<i>Sample ID:</i>	FB-6029-042412-010	
<i>Sample Date:</i>	4/24/2012	
<i>Parameters</i>		<i>Units</i>
Volatile Organic Compounds		
1,1,1-Trichloroethane	ug/L	ND (1.0)
1,1,2,2-Tetrachloroethane	ug/L	ND (1.0)
1,1,2-Trichloroethane	ug/L	ND (1.0)
1,1-Dichloroethane	ug/L	ND (1.0)
1,1-Dichloroethene	ug/L	ND (1.0)
1,2-Dichloroethane	ug/L	ND (1.0)
1,2-Dichloroethene (total)	ug/L	ND (1.0)
1,2-Dichloropropane	ug/L	ND (1.0)
2-Butanone (Methyl ethyl ketone) (MEK)	ug/L	ND (5.0)
2-Hexanone	ug/L	ND (5.0)
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	ug/L	ND (5.0)
Acetone	ug/L	ND (5.0)
Benzene	ug/L	ND (1.0)
Bromodichloromethane	ug/L	ND (1.0)
Bromoform	ug/L	ND (4.0)
Bromomethane (Methyl bromide)	ug/L	ND (2.0)
Carbon disulfide	ug/L	ND (2.0)
Carbon tetrachloride	ug/L	ND (1.0)
Chlorobenzene	ug/L	ND (1.0)
Chloroethane	ug/L	ND (1.0)
Chloroform (Trichloromethane)	ug/L	ND (1.0)
Chloromethane (Methyl chloride)	ug/L	ND (1.0)
cis-1,2-Dichloroethene	ug/L	ND (1.0)
cis-1,3-Dichloropropene	ug/L	ND (1.0)
Dibromochloromethane	ug/L	ND (1.0)
Ethylbenzene	ug/L	ND (1.0)
Methylene chloride	ug/L	ND (2.0)
Styrene	ug/L	ND (5.0)
Tetrachloroethene	ug/L	ND (1.0)
Toluene	ug/L	ND (1.0)
trans-1,2-Dichloroethene	ug/L	ND (1.0)
trans-1,3-Dichloropropene	ug/L	ND (1.0)
Trichloroethene	ug/L	ND (1.0)
Vinyl chloride	ug/L	ND (1.0)
Xylenes (total)	ug/L	ND (1.0)
Semivolatile Organic Compounds		
1,2,4-Trichlorobenzene	ug/L	ND (1.1)
1,2-Dichlorobenzene	ug/L	ND (1.1)
1,3-Dichlorobenzene	ug/L	ND (1.1)
1,4-Dichlorobenzene	ug/L	ND (1.1)
2,2'-Oxybis(1-chloropropane) (bis(2-Chloroisopropyl) ether)	ug/L	ND (2.1)
2,4,5-Trichlorophenol	ug/L	ND (5.3)
2,4,6-Trichlorophenol	ug/L	ND (5.3)
2,4-Dichlorophenol	ug/L	ND (5.3)
2,4-Dimethylphenol	ug/L	ND (5.3)
2,4-Dinitrophenol	ug/L	ND (21)
2,4-Dinitrotoluene	ug/L	ND (2.1)
2,6-Dinitrotoluene	ug/L	ND (2.1)
2-Chloronaphthalene	ug/L	ND (2.1)
2-Chlorophenol	ug/L	ND (5.3)
2-Methylnaphthalene	ug/L	ND (1.1)
2-Methylphenol	ug/L	ND (2.1)

TABLE B.7

Page 2 of 2

**ANALYTICAL DATA SUMMARY
FIELD BLANK - SURFACE WATER
2012 GROUNDWATER MONITORING EVENT
SUMMIT NATIONAL SUPERFUND SITE
DEERFIELD, OHIO**

<i>Sample Location:</i>	<i>Field Blank</i>	
<i>Sample ID:</i>	FB-6029-042412-010	
<i>Sample Date:</i>	4/24/2012	
<i>Parameters</i>	<i>Units</i>	
2-Nitroaniline	ug/L	ND (5.3)
2-Nitrophenol	ug/L	ND (5.3)
3&4-Methylphenol	ug/L	ND (2.1)
3,3'-Dichlorobenzidine	ug/L	ND (5.3)
3-Nitroaniline	ug/L	ND (5.3)
4,6-Dinitro-2-methylphenol	ug/L	ND (21)
4-Bromophenyl phenyl ether	ug/L	ND (2.1)
4-Chloro-3-methylphenol	ug/L	ND (5.3)
4-Chloroaniline	ug/L	ND (5.3)
4-Chlorophenyl phenyl ether	ug/L	ND (2.1)
4-Nitroaniline	ug/L	ND (5.3)
4-Nitrophenol	ug/L	ND (11)
Acenaphthene	ug/L	ND (1.1)
Acenaphthylene	ug/L	ND (1.1)
Anthracene	ug/L	ND (1.1)
Benzo(a)anthracene	ug/L	ND (1.1)
Benzo(a)pyrene	ug/L	ND (1.1)
Benzo(b)fluoranthene	ug/L	ND (1.1)
Benzo(g,h,i)perylene	ug/L	ND (1.1)
Benzo(k)fluoranthene	ug/L	ND (1.1)
bis(2-Chloroethoxy)methane	ug/L	ND (2.1)
bis(2-Chloroethyl)ether	ug/L	ND (2.1)
bis(2-Ethylhexyl)phthalate (DEHP)	ug/L	ND (2.1)
Butyl benzylphthalate (BBP)	ug/L	ND (2.1)
Carbazole	ug/L	ND (1.1)
Chrysene	ug/L	ND (1.1)
Dibenz(a,h)anthracene	ug/L	ND (1.1)
Dibenzo furan	ug/L	ND (5.3)
Diethyl phthalate	ug/L	ND (2.1)
Dimethyl phthalate	ug/L	ND (2.1)
Di-n-butylphthalate (DBP)	ug/L	ND (2.1)
Di-n-octyl phthalate (DnOP)	ug/L	ND (2.1)
Fluoranthene	ug/L	ND (1.1)
Fluorene	ug/L	ND (1.1)
Hexachlorobenzene	ug/L	ND (1.1)
Hexachlorobutadiene	ug/L	ND (1.1)
Hexachlorocyclopentadiene	ug/L	ND (11)
Hexachloroethane	ug/L	ND (2.1)
Indeno(1,2,3-cd)pyrene	ug/L	ND (1.1)
Isophorone	ug/L	ND (2.1)
Naphthalene	ug/L	ND (1.1)
Nitrobenzene	ug/L	ND (2.1)
N-Nitrosodi-n-propylamine	ug/L	ND (2.1)
N-Nitrosodiphenylamine	ug/L	ND (5.3)
Pentachlorophenol	ug/L	ND (11)
Phenanthrene	ug/L	ND (1.1)
Phenol	ug/L	ND (2.1)
Pyrene	ug/L	ND (1.1)

TABLE B.8

Page 1 of 1

**ANALYTICAL DATA SUMMARY
TRIP BLANK
2012 GROUNDWATER MONITORING EVENT
SUMMIT NATIONAL SUPERFUND SITE
DEERFIELD, OHIO**

<i>Sample Location:</i>	<i>Trip Blank</i>
<i>Sample ID:</i>	TB-6029-042412
<i>Sample Date:</i>	4/24/2012

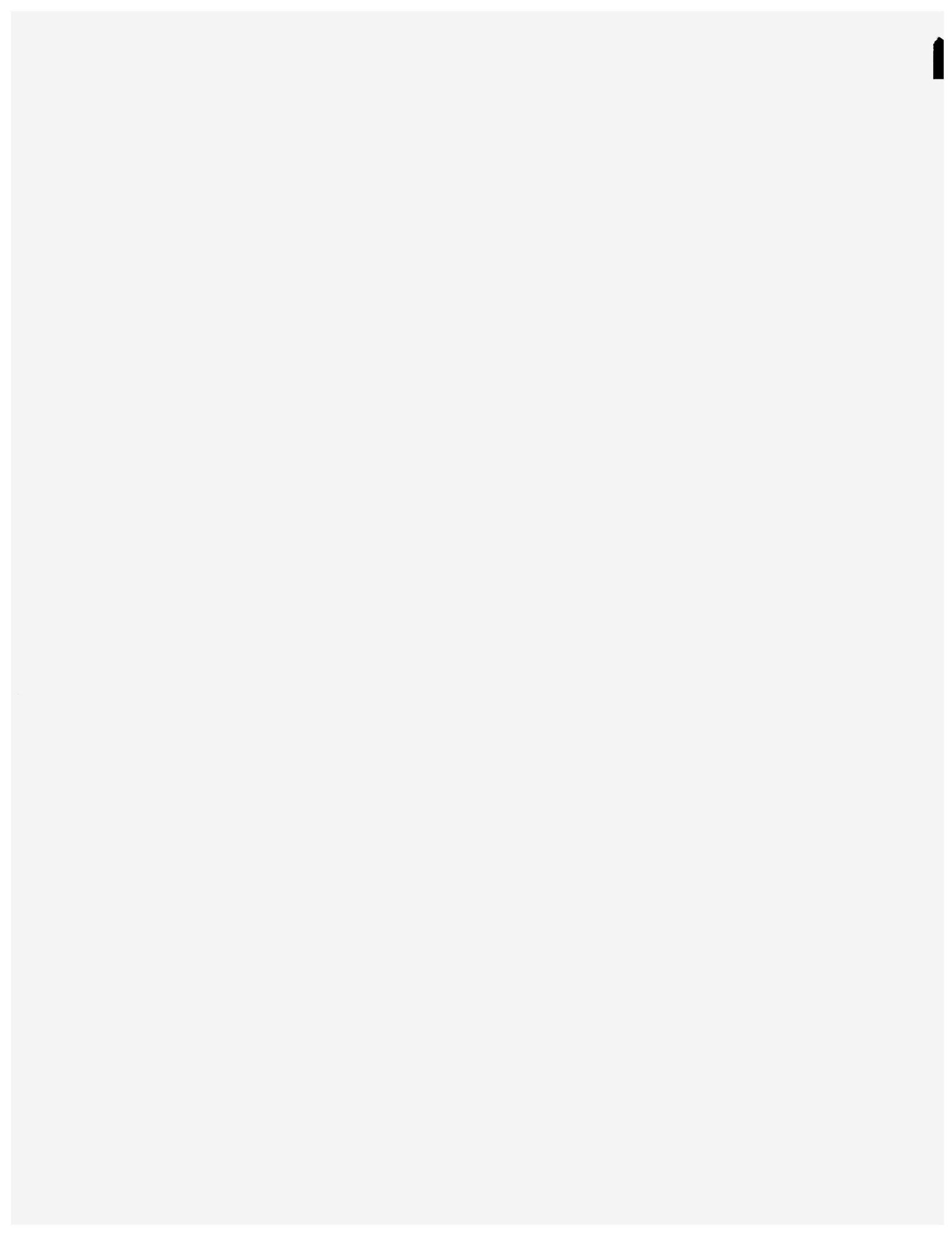
<i>Parameters</i>	<i>Units</i>
-------------------	--------------

Volatile Organic Compounds

1,1,1-Trichloroethane	ug/L	ND (1.0)
1,1-Dichloroethane	ug/L	ND (1.0)
1,2-Dichloroethane	ug/L	ND (1.0)
Acetone	ug/L	ND (5.0)
Benzene	ug/L	ND (1.0)
Chlorobenzene	ug/L	ND (1.0)
Chloroethane	ug/L	ND (1.0)
cis-1,2-Dichloroethene	ug/L	ND (1.0)
Ethylbenzene	ug/L	ND (1.0)
Toluene	ug/L	ND (1.0)
trans-1,2-Dichloroethene	ug/L	ND (1.0)
Trichloroethene	ug/L	ND (1.0)
Vinyl chloride	ug/L	ND (1.0)
Xylenes (total)	ug/L	ND (1.0)

ATTACHMENT C

DATA QUALITY ASSESSMENT





**CONESTOGA-ROVERS
& ASSOCIATES**

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MEMORANDUM

TO: Steve Whillier

REF. NO.: 006029

FROM: Deborah Brennan/bjw/5-NF *DBlyn*

DATE: June 27, 2012
Revision: June 28, 2012

CC: Nick Schapmann, Nate Ziegler

E-Mail and Hard Copy if Requested

RE: **Data Quality Assessment and Validation – Reduced Validation
Annual Groundwater, Surface Water, and Sediment Sampling Event
Summit National Superfund Site
April 24, 2012**

INTRODUCTION

The following details a quality assessment and validation of the analytical data resulting from the April 24, 2012 collection of groundwater, surface water, and sediment samples from the Summit National Superfund Site in Deerfield, Ohio. The sample summary detailing sample identification, sample location, quality control (QC) samples, and analytical parameters is presented in Table 1. Sample analysis was completed at Accutest Laboratories, Inc. in Dayton, New Jersey, in accordance with the methodologies presented in Table 2.

The quality assurance/quality control (QA/QC) criteria by which these data have been assessed are outlined in the analytical method and the document entitled:

- i) "USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review", October 1999, USEPA 540/R-99/008.

The guideline is referred to as the "Guidelines" in this memorandum.

SAMPLE QUANTITATION

The laboratory may have reported detected concentrations below the laboratory's report limit (RL) but above the laboratory's method detection limit (MDL). The laboratory flagged these sample concentrations with a "J". These concentrations should be qualified as estimated (J) values unless qualified otherwise in this memorandum.

SAMPLE PRESERVATION AND HOLDING TIMES

Sample holding time periods and preservation requirements are presented in the analytical method as well as Table 2. All samples were properly preserved and were analyzed within the required hold times.

SURROGATES

In accordance with the methods employed, all samples, blanks, and standards analyzed for volatile organic compounds (VOCs) and semi-volatile organic compounds (SVOCs) were spiked with surrogate compounds prior to sample extraction and/or analysis. Surrogate recoveries provide a means to evaluate the effects of individual sample matrices on analytical efficiency.

Surrogate recovery evaluations were performed as specified in the "Guidelines". All sample surrogate recoveries were acceptable, demonstrating good analytical efficiency.

METHOD BLANK SAMPLES

Method blank samples are prepared from a purified sample matrix and are processed concurrently with investigative samples to assess the presence and the magnitude of sample contamination introduced during sample analysis. Method blank samples are analyzed at a minimum frequency of one per analytical batch and target analytes should be non-detect.

Blank results were non-detect indicating that the compounds of interest were not introduced during sample collection, transport, storage and/or analysis.

LABORATORY CONTROL SAMPLE (LCS) ANALYSIS

The LCS analyses serve as a monitor of the overall performance in all steps of the sample analysis and are analyzed with each sample batch. The LCS percent recoveries were evaluated against method control limits.

All LCS percent recoveries were within the laboratory control limits, indicating that an acceptable level of overall performance was achieved.

MATRIX SPIKE/MATRIX SPIKE DUPLICATE (MS/MSD) ANALYSES

To evaluate the effects of sample matrices on the preparation, measurement procedures, and accuracy of a particular analysis, samples are spiked with a known concentration of the analyte of concern and analyzed as MS samples. The laboratory prepared the spike samples in duplicate, to assess analytical precision. The sample selected for MS/MSD analyses is specified in Table 1. The laboratory performed additional MS/MSD analyses internally. Per the "Guidelines", qualification of data is not required if the sample results exceed four times the spike concentration added.

While an MS/MSD were analyzed in association with all samples, samples from this project were not always chosen. These MS/MSD results were not evaluated on this basis. All other MS/MSD analyses performed were acceptable, demonstrating good analytical accuracy and precision.

TRIP BLANK ANALYSIS

One trip blank was submitted to the laboratory and analyzed for the selected VOCs (see Table 1). Trip blanks are collected to assess contamination from sample bottles, preservation, and storage. All results were non-detect for the VOCs of interest.

FIELD BLANK ANALYSIS

One field blank was submitted to the laboratory and analyzed for all requested analytes. The field blank analysis evaluates any ambient contamination that may be present during sampling.

No analytes were detected in the field blank at a level that affected the sample result.

EQUIPMENT (RINSE) BLANK ANALYSIS

Three equipment blanks were collected and submitted for this sampling event (see Table 1). The equipment blank analysis evaluates the presence of contamination that may be present as a result of the sampling process.

No analytes were detected in the equipment blank at a level that affected the sample result.

FIELD DUPLICATE ANALYSIS

To assess the analytical and sampling precision, one field duplicate sample was collected and submitted "blind" to the laboratory, as indicated in Table 1.

All field duplicate results associated with this project showed adequate reproducibility indicating satisfactory laboratory and sampling protocol precision.

OVERALL ASSESSMENT

The data were found to exhibit acceptable levels of accuracy and precision based on the provided information and may be used without qualification.

TABLE 1

**SAMPLE COLLECTION AND ANALYSIS SUMMARY
ANNUAL GROUNDWATER, SURFACE WATER, AND SEDIMENT SAMPLING EVENT
SUMMIT NATIONAL SUPERFUND SITE
DEERFIELD, OHIO
APRIL 24, 2012**

<u>Analysis/Parameters</u>						
<i>Sample ID</i>	<i>Location ID</i>	<i>Collection Date (mm/dd/yy)</i>	<i>Collection Time (hr:min)</i>	<i>VOCs</i>	<i>SVOCs</i>	<i>Comments</i>
<i>Surface Water</i>						
WS-6029-042412-008	S&E Ditches Sediment	04/24/12	6:30:00 PM	X	X	MS/MSD
WS-6029-042412-009	S&E Ditches Sediment	04/24/12	6:40:00 PM	X	X	
FB-6029-042412-010	Field Blank	04/24/12	6:50:00 PM	X	X	Field Blank
RB-6029-042412-011	Rinse Blank	04/24/12	7:00:00 PM	X	X	Rinse Blank
<i>Sediment</i>						
SE-6029-042412-012	S&E Ditches Sediment	04/24/12	7:15:00 PM	X	X	MS/MSD
SE-6029-042412-013	S&E Ditches Sediment	04/24/12	7:30:00 PM	X	X	
<i>Groundwater</i>						
WG-6029-042412-001	MW-113	04/24/12	3:15:00 PM	X		
WG-6029-042412-016	MW-115	04/24/12	8:35:00 PM	X		
WG-6029-042412-017	MW-114	04/24/12	8:45:00 PM	X		
WG-6029-042412-018	MW-220	04/24/12	8:55:00 PM	X		
WG-6029-042412-019	MW-209	04/24/12	9:05:00 PM	X		
WG-6029-042412-020	MW-209	04/24/12	9:15:00 PM	X		Field Duplicate of WG-6029-042412-019
WG-6029-042412-021	MW-224	04/24/12	9:25:00 PM	X		
WG-6029-042412-022	MW-207	04/24/12	9:35:00 PM	X		MS/MSD
TB-6029-042412	Trip Blank	04/24/12	9:35:00 PM	X		
WG-6029-042412-002	MW-107	04/24/12	3:25:00 PM	X		Trip Blank
WG-6029-042412-003	MW-108	04/24/12	3:35:00 PM	X		
WG-6029-042412-004	MW-11	04/24/12	3:45:00 PM	X		

TABLE 1

**SAMPLE COLLECTION AND ANALYSIS SUMMARY
ANNUAL GROUNDWATER, SURFACE WATER, AND SEDIMENT SAMPLING EVENT
SUMMIT NATIONAL SUPERFUND SITE
DEERFIELD, OHIO
APRIL 24, 2012**

<i>Sample ID</i>	<i>Location ID</i>	<i>Collection Date (mm/dd/yy)</i>	<i>Collection Time (hr:min)</i>	<i>VOCs</i>	<i>SVOCs</i>	<i>Analysis/Parameters</i>	<i>Comments</i>
WG-6029-042412-005	MW-107	04/24/12	3:55:00 PM	X			
WG-6029-042412-006	MW-111	04/24/12	4:05:00 PM	X			
RB-6029-042412-007	Rinse Blank	04/24/12	4:15:00 PM	X			Rinse Blank
RB-6029-042412-014	Rinse Blank	04/24/12	8:15:00 PM	X			Rinse Blank
WG-6029-042412-015	MW-4	04/24/12	8:25:00 PM	X			MS/MSD

Notes:

MS Matrix Spike

MSD Matrix Spike Duplicate

VOCs Volatile Organic Compounds

SVOCs Semi-Volatile Organic Compounds

TABLE 2

**SAMPLE HOLDING TIME CRITERIA AND ANALYTICAL METHODS SUMMARY
ANNUAL GROUNDWATER, SURFACE WATER, AND SEDIMENT SAMPLING EVENT
SUMMIT NATIONAL SUPERFUND SITE
DEERFIELD, OHIO
APRIL 24, 2012**

<i>Parameter</i>	<i>Analytical Method</i>	<i>Collection/Extraction to Analysis (Days)</i>
VOCs	8260 ¹	14 days
SVOCs	8270 ¹	7/40 days - water 14/40 days - soil

Notes:

¹ Referenced from "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", SW-846, Third Edition, 1986, with subsequent revisions.

VOCs Volatile Organic Compounds

SVOCs Semi-Volatile Organic Compounds

ATTACHMENT D

ACETONE DETECTIONS IN SELECT WELLS

TABLE D.1
ACETONE CONCENTRATIONS AT SELECT WELLS - 2004 TO 2012
SUMMIT NATIONAL SUPERFUND SITE
DEERFIELD, OHIO

<i>Sample Date</i>	<i>Well Designation</i>			
	<i>MW-108</i>	<i>MW-113</i>	<i>MW-209</i>	<i>MW-220</i>
October 2004	5.4 J	ND (10)	3.2 J	ND (10)
August 2005	ND (5)	ND (5)	15.6/15.8*	19.7
November 2005	NS	ND (5)	NS	NS
February 2006	ND (5)	ND (5)	14.7	ND (5)
August 2006	8.4	ND (5)	18.8	ND (5)
April 2007	ND (5)	ND (5)	ND (5)	ND (5)
November 2007	ND (5)	ND (5)	8.7	ND (5)
April 2008	5.7	ND (5)	18.7	23.5
November 2008	ND (5)	7.4	9.7	12.8
April 2009	3.8 J	ND (5)	14.4	ND (5)
June 2010	4.1 J	3.6 J	9.6/9.1*	13.8
April 2011	ND (10)	ND (10)	ND (10)/ND (10)*	ND (10)
April 2012	ND (5)	5.9	ND (5)	ND (5)

Notes:

All measurements are in micrograms per liter ($\mu\text{g}/\text{L}$)

NS = Not Sampled

* = duplicate sample

J = estimated concentration

The USEPA Regional Screening Level (RSL) for acetone in tap water is 22,000 $\mu\text{g}/\text{L}$.

ATTACHMENT E

GROUNDWATER ELEVATIONS AND CONTOURS

TABLE E.1

**GROUNDWATER LEVEL DATA SUMMARY
OCTOBER 2004 TO APRIL 2012
SUMMIT NATIONAL SUPERFUND SITE
DEERFIELD, OHIO**

Well	Reference	Aquifer	4-Oct-04		31-Jan-05		4-May-05		22-Aug-05		27-Sep-05		27-Oct-05		28-Nov-05		20-Feb-06		30-May-06	
	Elevation	Unit	Depth To Water	Elevation																
Water Table Unit Wells																				
MW-4	1,091.09	WTU	7.68	1,083.41	7.22	1,083.87	7.14	1,083.95	8.66	1,082.43	8.48	1,082.61	7.55	1,083.54	6.94	1,084.15	6.24	1,084.85	6.62	1,084.47
MW-11	1,095.93	WTU	13.32	1,082.61	13.29	1,082.64	13.02	1,082.91	12.72	1,083.21	10.44	1,085.49	9.33	1,086.60	9.92	1,086.01	9.49	1,086.44	9.57	1,086.36
MW-101	1,107.57	WTU	8.35	1,099.22	8.20	1,099.37	7.93	1,099.64	8.97	1,098.60	4.07	1,103.50	8.55	1,099.02	8.51	1,099.06	7.75	1,099.82	7.85	1,099.72
MW-102	1,100.17	WTU	4.96	1,095.21	4.98	1,095.19	4.12	1,096.05	5.52	1,094.65	5.61	1,094.56	5.13	1,095.04	4.72	1,095.45	4.04	1,096.13	4.04	1,096.13
MW-103	1,096.22	WTU	2.78	1,093.44	2.67	1,093.55	2.29	1,093.93	3.57	1,092.65	2.90	1,093.32	2.11	1,094.11	2.35	1,093.87	2.31	1,093.91	2.52	1,093.70
MW-104	1,099.81	WTU	16.70	1,083.11	18.21	1,081.60	17.29	1,082.52	16.10	1,083.71	13.94	1,085.87	16.48	1,083.33	13.38	1,086.43	12.82	1,086.99	12.91	1,086.90
MW-105	1,101.32	WTU	18.24	1,083.08	17.96	1,083.36	16.88	1,084.44	17.68	1,083.64	15.62	1,085.70	14.47	1,086.85	14.98	1,086.34	14.40	1,086.92	14.30	1,087.02
MW-106	1,102.88	WTU	18.58	1,084.30	18.79	1,084.09	17.25	1,085.63	18.45	1,084.43	17.17	1,085.71	15.97	1,086.91	16.04	1,086.84	15.28	1,087.60	15.37	1,087.51
MW-107	1,098.27	WTU	12.26	1,086.01	13.22	1,085.05	13.14	1,085.13	12.86	1,085.41	12.40	1,085.87	11.27	1,087.00	10.94	1,087.33	9.96	1,088.31	10.06	1,088.21
MW-108	1,091.96	WTU	9.44	1,082.52	9.12	1,082.84	8.81	1,083.15	8.78	1,083.18	8.66	1,083.30	5.50	1,086.46	5.98	1,085.98	5.90	1,086.06	5.85	1,086.11
MW-109	1,087.42	WTU	4.57	1,082.85	3.61	1,083.81	3.28	1,084.14	5.14	1,082.28	5.20	1,082.22	4.18	1,083.24	3.92	1,083.50	3.24	1,084.18	3.54	1,083.88
MW-110	1,086.87	WTU	8.28	1,078.59	5.47	1,081.40	5.25	1,081.62	11.22	1,075.65	11.74	1,075.13	11.44	1,075.43	10.75	1,076.12	6.68	1,080.19	7.13	1,079.74
MW-111	1,099.67	WTU	16.97	1,082.70	17.11	1,082.56	17.09	1,082.58	16.41	1,083.26	14.21	1,085.46	13.08	1,086.59	13.57	1,086.10	13.10	1,086.57	13.18	1,086.49
MW-113	1,088.46	WTU	7.77	1,080.69	7.14	1,081.32	6.93	1,081.53	8.00	1,080.46	7.26	1,081.20	5.17	1,083.29	6.61	1,081.85	5.42	1,083.04	5.88	1,082.58
MW-114	1,097.27	WTU	10.83	1,086.44	10.72	1,086.55	10.66	1,086.61	10.76	1,086.51	9.76	1,087.51	8.84	1,088.43	9.24	1,088.03	8.93	1,088.34	8.84	1,088.43
MW-115	1,101.83	WTU	18.73	1,083.10	18.04	1,083.79	17.37	1,084.46	18.84	1,082.99	17.90	1,083.93	17.25	1,084.58	17.55	1,084.28	17.16	1,084.67	17.20	1,084.63
MW-116	1,105.54	WTU	22.73	1,082.81	23.77	1,081.77	21.11	1,084.43	23.91	1,081.63	24.14	1,081.40	24.26	1,081.28	23.58	1,081.96	23.13	1,082.41	23.02	1,082.52
MW-117	1,123.97	WTU	44.78	1,079.19	44.83	1,079.14	43.94	1,080.03	48.36	1,075.61	47.53	1,076.44	42.44	1,081.53	44.25	1,079.72	41.95	1,082.02	42.74	1,081.23
MW-118	1,098.38	WTU	24.97	1,073.41	25.74	1,072.64	23.82	1,074.56	25.61	1,072.77	26.33	1,072.05	24.92	1,073.46	25.05	1,073.33	23.96	1,074.42	23.47	1,074.91
PZ-1	1,104.43	WTU	8.38	1,096.05	8.23	1,096.20	8.11	1,096.32	9.00	1,095.43	9.11	1,095.32	8.63	1,095.80	8.28	1,096.15	7.52	1,096.91	7.63	1,096.80
PZ-101	1,108.53	WTU	14.00	1,094.53	14.11	1,094.42	12.88	1,095.65	14.46	1,094.07	14.52	1,094.01	14.01	1,094.52	13.62	1,094.91	12.74	1,095.79	12.85	1,095.68
PZ-102	1,100.21	WTU	9.78	1,090.43	12.47	1,087.74	12.17	1,088.04	10.27	1,089.94	12.33	1,087.88	9.62	1,090.59	9.18	1,091.03	8.35	1,091.86	8.27	1,091.94
PZ-103	1,093.98	WTU	7.20	1,086.78	7.83	1,086.15	7.36	1,086.62	7.88	1,086.10	8.13	1,085.85	7.29	1,086.69	6.62	1,087.36	6.00	1,087.98	6.40	1,087.58
PZ-104	1,097.54	WTU	12.27	1,085.27	11.88	1,085.66	10.27	1,087.27	13.00	1,084.54	12.93	1,084.61	11.10	1,086.44	11.50	1,086.04	10.57	1,086.97	10.55	1,086.99
PZ-105	1,101.60	WTU	20.27	1,081.33	18.26	1,083.34	17.51	1,084.09	21.68	1,079.92	22.11	1,079.49	19.87	1,081.73	20.26	1,081.34	18.51	1,083.09	18.88	1,082.72
PZ-106	1,102.23	WTU	24.07	1,078.16	19.89	1,082.34	19.44	1,082.79	25.65	1,076.58	26.88	1,075.35	26.25	1,075.98	25.03	1,077.20	23.01	1,079.22	22.78	1,079.45
Upper Intermediate Unit Wells																				
MW-201	1,107.52	UIU	11.79	1,095.73	11.44	1,096.08	10.23	1,097.29	12.71	1,094.81	12.98	1,094.54	12.53	1,						

TABLE E.1

**GROUNDWATER LEVEL DATA SUMMARY
OCTOBER 2004 TO APRIL 2012
SUMMIT NATIONAL SUPERFUND SITE
DEERFIELD, OHIO**

Well	Reference	Aquifer	14-Aug-06		20-Dec-06		25-May-07		12-Nov-07		15-Apr-08		4-Nov-08		20-Apr-09		2-Jun-10		29-Apr-11		24-Apr-12	
	Elevation	Unit	Depth To Water	Elevation																		
Water Table Unit Wells																						
MW-4	1,091.09	WTU	7.55	1,083.54	6.55	1,084.54	7.36	1,083.73	8.47	1,082.62	6.31	1,084.78	8.57	1,082.52	6.22	1,084.87	6.48	1,084.61	11.91	1,088.14	7.01	1084.08
MW-11	1,095.93	WTU	10.10	1,085.83	9.43	1,086.50	9.87	1,086.06	10.29	1,085.64	9.08	1,086.85	10.41	1,085.52	9.12	1,086.81	9.18	1,086.75	8.42	1,087.51	9.61	1086.32
MW-101	1,107.57	WTU	8.61	1,098.96	7.81	1,099.76	8.51	1,099.06	9.04	1,098.53	7.43	1,100.14	9.51	1,098.06	7.48	1,100.09	7.43	1,100.14	6.81	1,100.76	8.31	1099.26
MW-102	1,100.17	WTU	4.58	1,095.59	4.02	1,096.15	4.71	1,095.46	5.36	1,094.81	3.70	1,096.47	5.79	1,094.38	3.47	1,096.70	3.51	1,096.66	2.89	1,097.28	3.96	1096.21
MW-103	1,096.22	WTU	3.38	1,092.84	2.40	1,093.82	2.89	1,093.33	2.94	1,093.28	2.00	1,094.22	3.16	1,093.06	1.78	1,094.44	2.07	1,094.15	1.82	1,094.40	2.42	1093.80
MW-104	1,099.81	WTU	13.51	1,086.30	12.44	1,087.37	13.23	1,086.58	13.69	1,086.12	12.21	1,087.60	13.94	1,085.87	12.40	1,087.41	12.37	1,087.44	11.52	1,088.29	12.68	1087.13
MW-105	1,101.32	WTU	15.08	1,086.24	14.29	1,087.03	14.89	1,086.43	15.34	1,085.98	13.92	1,087.40	15.61	1,085.71	14.03	1,087.29	14.06	1,087.26	13.21	1,088.11	14.42	1086.90
MW-106	1,102.88	WTU	16.06	1,086.82	15.36	1,087.52	15.91	1,086.97	16.51	1,086.37	14.81	1,088.07	16.83	1,086.05	14.91	1,087.97	15.07	1,087.81	14.06	1,088.82	15.47	1087.41
MW-107	1,098.27	WTU	10.64	1,087.63	9.98	1,088.29	10.91	1,087.36	11.63	1,086.64	9.64	1,088.63	12.21	1,086.06	9.77	1,088.50	10.06	1,088.21	8.69	1,089.58	10.61	1087.66
MW-108	1,091.96	WTU	6.23	1,085.73	5.83	1,086.13	6.30	1,085.66	6.42	1,085.54	5.48	1,086.48	6.54	1,085.42	5.39	1,086.57	5.49	1,086.47	4.78	1,087.18	6.00	1085.96
MW-109	1,087.42	WTU	4.42	1,083.00	3.54	1,083.88	4.34	1,083.08	5.69	1,081.73	3.09	1,084.33	6.35	1,081.07	2.93	1,084.49	3.51	1,083.91	2.68	1,084.74	4.08	1083.34
MW-110	1,086.87	WTU	10.28	1,076.59	7.03	1,079.84	8.37	1,078.50	11.51	1,075.36	5.66	1,081.21	12.26	1,074.61	5.83	1,081.04	6.56	1,080.31	4.91	1,081.96	7.13	1079.74
MW-111	1,099.67	WTU	13.75	1,085.92	13.16	1,086.51	13.52	1,086.15	13.91	1,085.76	12.72	1,086.95	14.12	1,085.55	12.76	1,086.91	12.81	1,086.86	12.03	1,087.64	13.26	1086.41
MW-113	1,088.46	WTU	7.22	1,081.24	5.53	1,082.93	6.39	1,082.07	7.66	1,080.80	4.02	1,084.44	7.92	1,080.54	4.96	1,083.50	4.51	1,083.95	4.38	1,084.08	6.58	1081.88
MW-114	1,097.27	WTU	9.94	1,087.33	8.82	1,088.45	9.39	1,087.88	9.63	1,087.64	8.28	1,088.99	10.11	1,087.16	8.09	1,089.18	8.10	1,089.17	7.66	1,089.61	9.11	1088.16
MW-115	1,101.83	WTU	17.70	1,084.13	17.12	1,084.71	17.36	1,084.47	17.80	1,084.03	16.60	1,085.23	17.93	1,083.90	16.63	1,085.20	16.58	1,085.25	16.21	1,085.62	17.12	1084.71
MW-116	1,105.54	WTU	22.96	1,082.58	22.98	1,082.56	23.26	1,082.28	23.88	1,081.66	21.92	1,083.62	24.46	1,081.08	22.14	1,083.40	22.39	1,083.15	21.58	1,083.96	22.00	1083.54
MW-117	1,123.97	WTU	45.32	1,078.65	41.81	1,082.16	42.94	1,081.03	46.16	1,077.81	40.29	1,083.68	47.92	1,076.05	40.83	1,083.14	40.78	1,083.19	39.92	1,084.05	42.78	1081.19
MW-118	1,098.38	WTU	25.06	1,073.32	23.44	1,074.94	24.11	1,074.27	26.21	1,072.17	23.13	1,075.25	27.51	1,070.87	23.43	1,074.95	23.48	1,074.90	22.61	1,075.77	24.18	1074.20
PZ-1	1,104.43	WTU	8.09	1,096.34	7.60	1,096.83	8.32	1,096.11	8.88	1,095.55	6.91	1,097.52	9.27	1,095.16	6.61	1,097.82	6.96	1,097.47	5.85	1,098.58	7.53	1096.90
PZ-101	1,108.53	WTU	13.37	1,095.16	12.77	1,095.76	13.46	1,095.07	14.13	1,094.40	12.35	1,096.18	14.51	1,094.02	12.22	1,096.31	12.34	1,096.19	11.61	1,096.92	12.78	1095.75
PZ-102	1,100.21	WTU	8.83	1,091.38	8.29	1,091.92	9.02	1,091.19	9.92	1,090.29	7.92	1,092.29	10.36	1,089.85	7.92	1,092.29	8.03	1,092.18	7.19	1,093.02	8.47	1091.74
PZ-103	1,093.98	WTU	7.14	1,086.84	6.34	1,087.64	7.16	1,086.82	8.75	1,085.23	6.35	1,087.63	9.43	1,084.55	6.12	1,087.86	6.52	1,087.46	6.06	1,087.92	7.02	1086.96
PZ-104	1,097.54	WTU	11.81	1,085.73	10.43	1,087.11	11.62	1,085.92	12.43	1,085.11	10.03	1,087.51	13.37	1,084.17	10.06	1,087.48	10.10	1,087.44	9.07	1,088.47	11.36	1086.18
PZ-105	1,101.60	WTU	20.91	1,080.69	18.90	1,082.70	19.38	1,082.22	21.65	1,079.95	17.22	1,084.38	23.11	1,078.49	17.56	1,084.04	17.53	1,084.07	16.53</td			

TABLE E.1

**GROUNDWATER LEVEL DATA SUMMARY
OCTOBER 2004 TO APRIL 2012
SUMMIT NATIONAL SUPERFUND SITE
DEERFIELD, OHIO**

Well	Reference	Aquifer	4-Oct-04		31-Jan-05		4-May-05		22-Aug-05		27-Sep-05		27-Oct-05		28-Nov-05		20-Feb-06		30-May-06	
	Elevation	Unit	Depth To Water	Elevation																
<i>Lower Intermediate Unit Wells</i>																				
MW-301	1,107.91	LIU	31.73	1,076.18	29.89	1,078.02	28.44	1,079.47	31.50	1,076.41	19.76	1,088.15	30.77	1,077.14	32.22	1,075.69	29.60	1,078.31	29.68	1,078.23
MW-302	1,100.39	LIU	29.76	1,070.63	27.63	1,072.76	27.19	1,073.20	29.57	1,070.82	24.02	1,076.37	28.72	1,071.67	28.96	1,071.43	26.92	1,073.47	26.37	1,074.02
MW-303	1,103.15	LIU	32.31	1,070.84	28.19	1,074.96	28.03	1,075.12	29.72	1,073.43	30.02	1,073.13	29.52	1,073.63	29.68	1,073.47	27.83	1,075.32	27.20	1,075.95
MW-304	1,097.73	LIU	17.17	1,080.56	16.33	1,081.40	15.88	1,081.85	17.45	1,080.28	17.01	1,080.72	16.98	1,080.75	16.92	1,080.81	15.52	1,082.21	15.77	1,081.96
MW-305	1,101.22	LIU	31.93	1,069.29	28.43	1,072.79	27.93	1,073.29	31.05	1,070.17	23.83	1,077.39	31.38	1,069.84	31.58	1,069.64	26.76	1,074.46	29.77	1,071.45
MW-306	1,103.14	LIU	33.61	1,069.53	29.24	1,073.90	29.15	1,073.99	30.93	1,072.21	33.70	1,069.44	31.52	1,071.62	31.40	1,071.74	33.43	1,069.71	31.64	1,071.50
MW-307	1,098.83	LIU	29.04	1,069.79	25.29	1,073.54	24.89	1,073.94	26.31	1,072.52	26.48	1,072.35	27.88	1,070.95	28.00	1,070.83	24.37	1,074.46	25.23	1,073.60
MW-309	1,087.81	LIU	17.95	1,069.86	15.04	1,072.77	14.27	1,073.54	15.94	1,071.87	15.48	1,072.33	16.91	1,070.90	17.20	1,070.61	13.36	1,074.45	14.62	1,073.19
MW-319	1,108.07	LIU	21.13	1,086.94	22.92	1,085.15	22.47	1,085.60	22.40	1,085.67	19.92	1,088.15	20.61	1,087.46	20.79	1,087.28	19.77	1,088.30	19.59	1,088.48
MW-320	1,091.14	LIU	20.23	1,070.91	20.64	1,070.50	20.10	1,071.04	20.52	1,070.62	20.09	1,071.05	20.47	1,070.67	20.27	1,070.87	19.49	1,071.65	19.63	1,071.51
MW-321	1,095.32	LIU	25.53	1,069.79	21.44	1,073.88	20.44	1,074.88	22.58	1,072.74	22.95	1,072.37	23.42	1,071.90	23.71	1,071.61	21.30	1,074.02	20.96	1,074.36
MW-322	1,098.88	LIU	17.45	1,081.43	16.82	1,082.06	16.26	1,082.62	20.45	1,078.43	16.43	1,082.45	15.32	1,083.56	17.20	1,081.68	15.78	1,083.10	16.04	1,082.84
MW-323	1,097.51	LIU	29.12	1,068.39	25.08	1,072.43	24.83	1,072.68	27.06	1,070.45	26.25	1,071.26	26.98	1,070.53	25.88	1,071.63	24.47	1,073.04	24.08	1,073.43
MW-324	1,089.39	LIU	18.15	1,071.24	18.21	1,071.18	18.26	1,071.13	18.18	1,071.21	17.60	1,071.79	17.72	1,071.67	17.15	1,072.24	16.07	1,073.32	16.35	1,073.04
PZ-301	1,100.07	LIU	20.20	1,079.87	19.04	1,081.03	18.89	1,081.18	20.81	1,079.26	19.41	1,080.66	19.84	1,080.23	19.77	1,080.30	18.51	1,081.56	18.40	1,081.67
PZ-302	1,101.25	LIU	31.74	1,069.51	28.94	1,072.31	28.83	1,072.42	28.48	1,072.77	28.83	1,072.42	30.80	1,070.45	30.68	1,070.57	26.64	1,074.61	28.21	1,073.04
PZ-303	1,098.39	LIU	29.78	1,068.61	25.07	1,073.32	24.94	1,073.45	26.46	1,071.93	20.61	1,077.78	26.62	1,071.77	26.03	1,072.36	23.81	1,074.58	23.73	1,074.66
PZ-305	1,096.49	LIU	27.17	1,069.32	22.71	1,073.78	22.27	1,074.22	24.00	1,072.49	24.47	1,072.02	24.58	1,071.91	24.32	1,072.17	22.06	1,074.43	21.94	1,074.55
PZ-306	1,088.35	LIU	15.70	1,072.65	16.05	1,072.30	14.92	1,073.43	16.32	1,072.03	16.12	1,072.23	16.26	1,072.09	17.28	1,071.07	14.58	1,073.77	14.57	1,073.78
PZ-307	1,091.40	LIU	16.64	1,074.76	17.85	1,073.55	17.25	1,074.15	17.47	1,073.93	17.37	1,074.03	17.58	1,073.82	28.00	1,063.40	14.89	1,076.51	15.22	1,076.18
<i>Upper Sharon Unit Wells</i>																				
MW-401	1,099.75	USU	35.45	1,064.30	35.19	1,064.56	34.88	1,064.87	35.30	1,064.45	34.59	1,065.16	35.40	1,064.35	34.59	1,065.16	33.40	1,066.35	33.38	1,066.37
MW-402	1,089.90	USU	32.26	1,057.64	33.68	1,056.22	31.94	1,057.96	31.88	1,058.02	34.05	1,055.85	33.61	1,056.29	33.18	1,056.72	31.70	1,058.20	31.17	1,058.73
MW-414	1,096.99	USU	25.09	1,071.90	25.10	1,071.89	24.03	1,072.96	24.96	1,072.03	24.46	1,072.53	25.17	1,071.82	24.82	1,072.17	23.82	1,073.17	24.15	1,072.84
MW-415	1,102.25	USU	33.92	1,068.33	28.86	1,073.39	28.42	1,073.83	31.17	1,071.08	30.20	1,072.05	31.84	1,070.41	30.97	1,071.28	28.07	1,074.18	29.55	1,072.70
MW-420	1,091.66	USU	29.44	1,062.22	28.78	1,062.88	28.07	1,063.59	29.21	1,062.45	29.15	1,062.51	29.27	1,062.39	28.96	1,062.70	27.44	1,064.22	26.74	1,064.92
MW-421	1,099.93	USU	28.82	1,071.11	29.04	1,070.89	28.67	1,071.26	29.11	1,070.82	29.41	1,070.52	29.05	1,070.88	28.79	1,071.14	28.00	1,071.93	28.20	1,071.73
MW-422	1,107.38	USU	23.63	1,083.75																

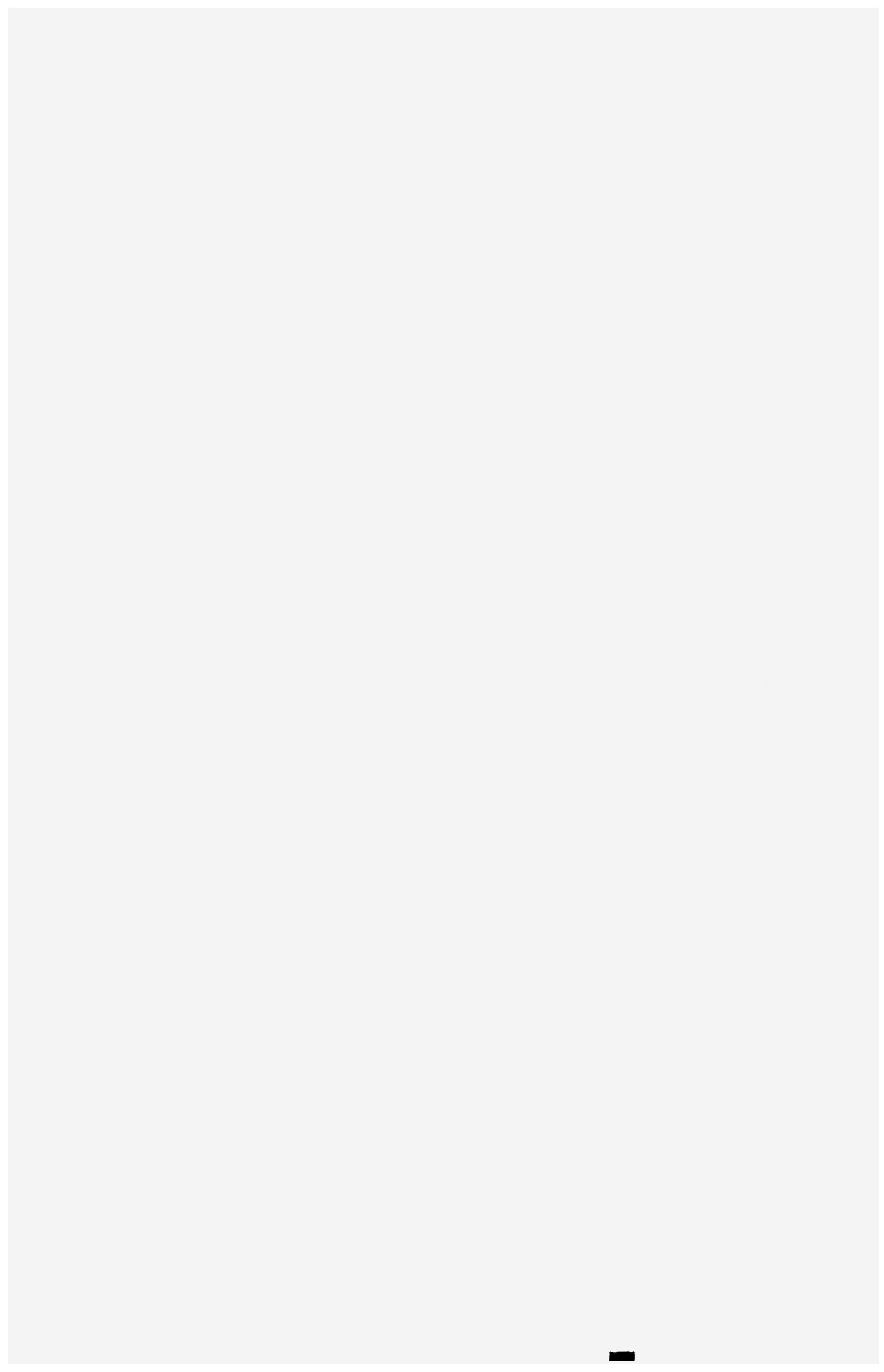
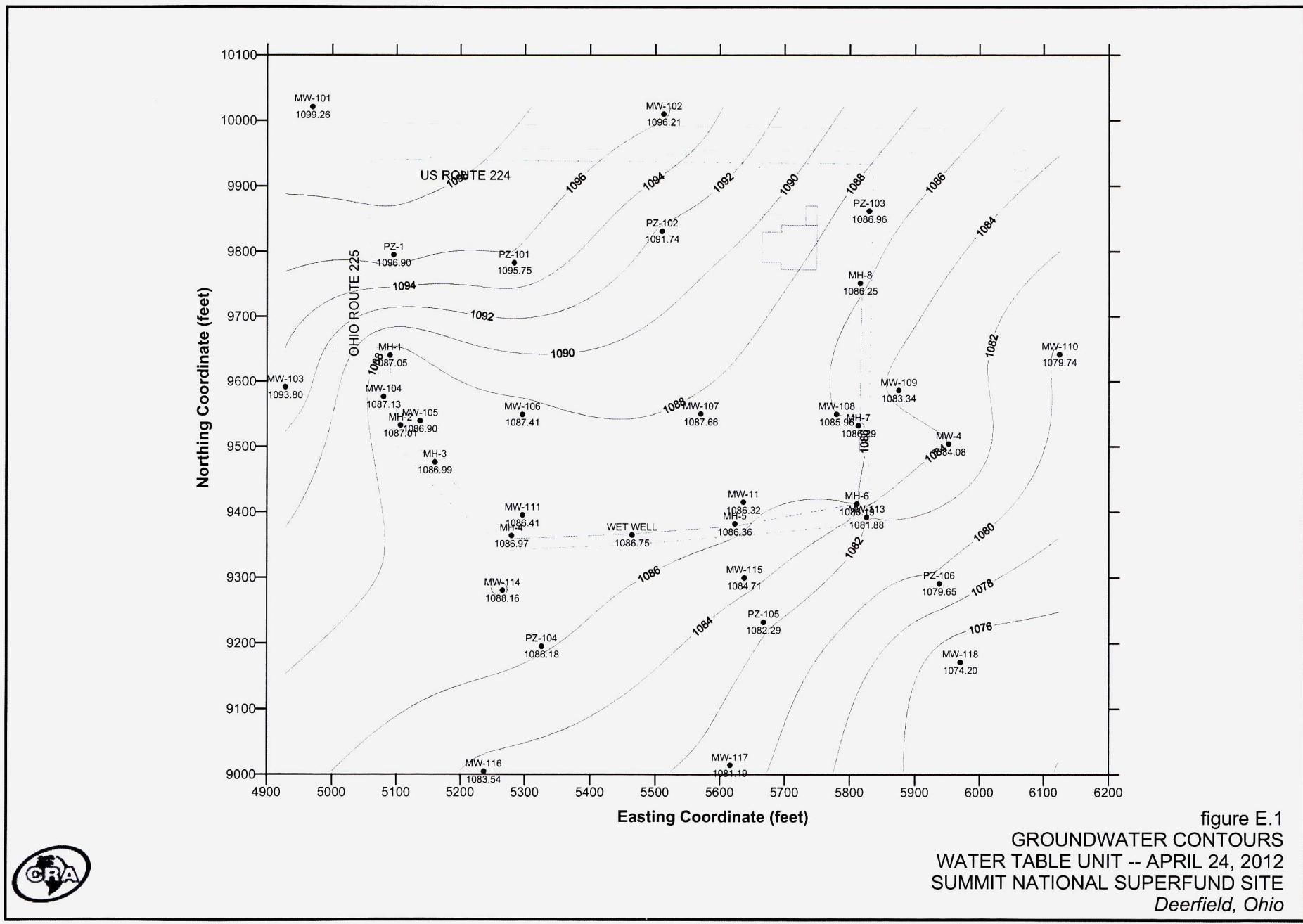
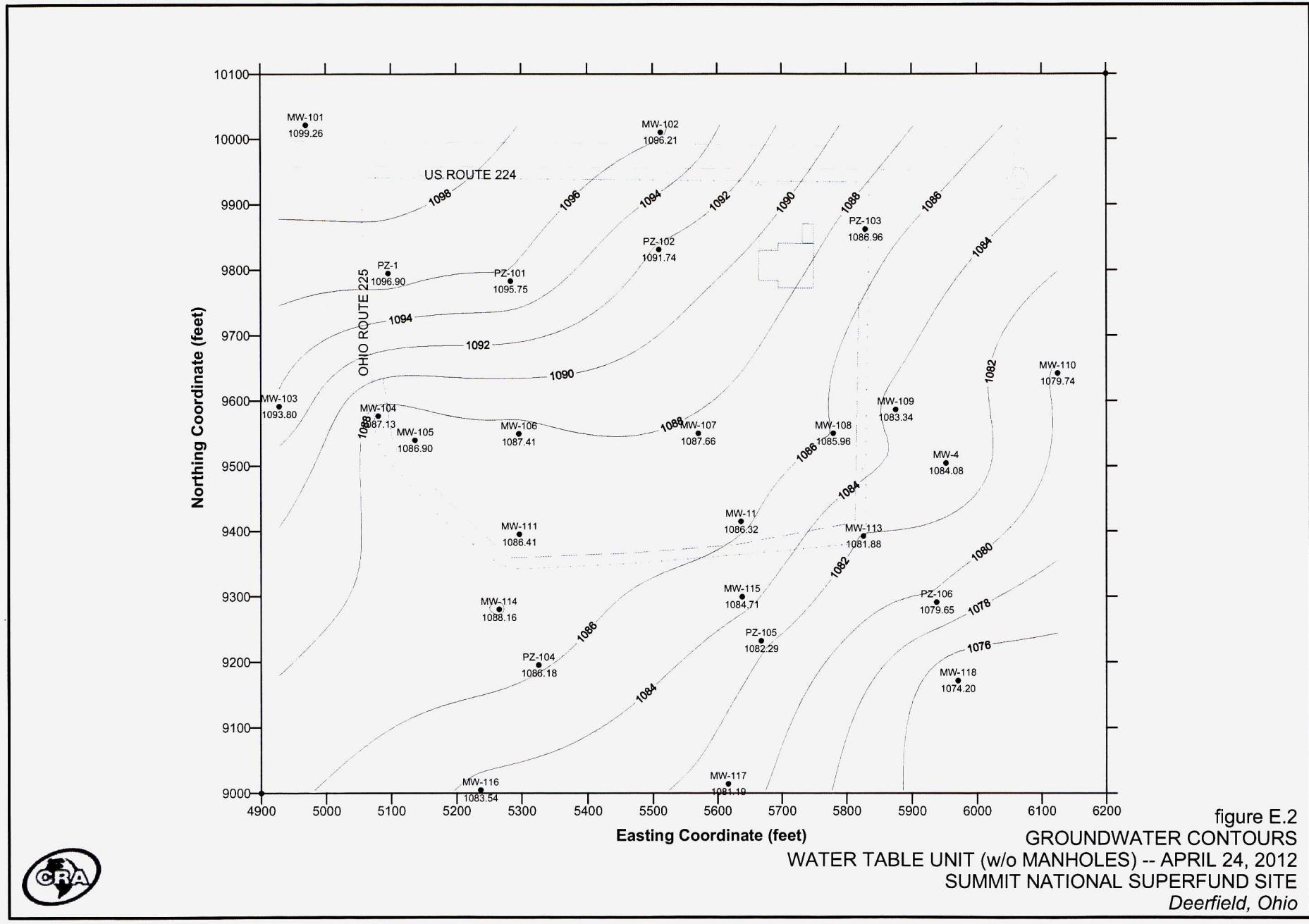


TABLE E.1

**GROUNDWATER LEVEL DATA SUMMARY
OCTOBER 2004 TO APRIL 2012
SUMMIT NATIONAL SUPERFUND SITE
DEERFIELD, OHIO**

Well	Reference	Aquifer	14-Aug-06		20-Dec-06		25-May-07		12-Nov-07		15-Apr-08		4-Nov-08		20-Apr-09		2-Jun-10		29-Apr-11		24-Apr-12	
	Elevation	Unit	Depth To Water	Elevation																		
Lower Intermediate Unit Wells																						
MW-301	1,107.91	LIU	31.57	1,076.34	29.60	1,078.31	31.06	1,076.85	30.78	1,077.13	27.25	1,080.66	32.20	1,075.71	27.61	1,080.30	27.98	1,079.93	26.93	1,080.98	28.66	1079.25
MW-302	1,100.39	LIU	29.20	1,071.19	26.35	1,074.04	29.12	1,071.27	28.27	1,072.12	24.17	1,076.22	30.48	1,069.91	24.49	1,075.90	25.28	1,075.11	24.32	1,076.07	25.28	1075.11
MW-303	1,103.15	LIU	29.46	1,073.69	27.60	1,075.55	30.03	1,073.12	29.05	1,074.10	24.94	1,078.21	31.53	1,071.62	25.33	1,077.82	25.78	1,077.37	24.40	1,078.75	26.98	1076.17
MW-304	1,097.73	LIU	16.77	1,080.96	15.58	1,082.15	17.93	1,079.80	17.32	1,080.41	13.39	1,084.34	18.50	1,079.23	14.22	1,083.51	14.79	1,082.94	13.69	1,084.04	15.03	1082.70
MW-305	1,101.22	LIU	28.73	1,072.49	29.70	1,071.52	28.12	1,073.10	28.06	1,073.16	27.32	1,073.90	29.73	1,071.49	27.58	1,073.64	24.82	1,076.40	23.29	1,077.93	25.77	1075.45
MW-306	1,103.14	LIU	30.03	1,073.11	31.61	1,071.53	31.51	1,071.63	30.46	1,072.68	26.08	1,077.06	32.52	1,070.62	26.54	1,076.60	27.22	1,075.92	25.68	1,077.46	27.82	1075.32
MW-307	1,098.83	LIU	26.08	1,072.75	25.06	1,073.77	26.28	1,072.55	25.62	1,073.21	21.71	1,077.12	27.59	1,071.24	21.85	1,076.98	22.38	1,076.45	20.91	1,077.92	23.39	1075.44
MW-309	1,087.81	LIU	15.05	1,072.76	14.22	1,073.59	15.15	1,072.66	14.61	1,073.20	11.27	1,076.54	16.48	1,071.33	11.37	1,076.44	11.42	1,076.39	9.96	1,077.85	12.38	1075.43
MW-319	1,108.07	LIU	20.50	1,087.57	19.93	1,088.14	22.09	1,085.98	20.68	1,087.39	18.43	1,089.64	20.91	1,087.16	19.12	1,088.95	19.02	1,089.05	18.16	1,089.91	18.74	1089.33
MW-320	1,091.14	LIU	19.80	1,071.34	19.60	1,071.54	20.69	1,070.45	20.48	1,070.66	18.38	1,072.76	20.48	1,070.66	18.53	1,072.61	18.78	1,072.36	18.16	1,072.98	18.28	1072.86
MW-321	1,095.32	LIU	22.48	1,072.84	20.93	1,074.39	22.75	1,072.57	22.00	1,073.32	17.94	1,077.38	24.07	1,071.25	18.21	1,077.11	18.76	1,076.56	17.30	1,078.02	19.87	1075.45
MW-322	1,098.88	LIU	16.20	1,082.68	15.97	1,082.91	16.61	1,082.27	16.22	1,082.66	12.58	1,086.30	17.09	1,081.79	13.93	1,084.95	14.11	1,084.77	13.12	1,085.76	14.19	1084.69
MW-323	1,097.51	LIU	25.70	1,071.81	23.97	1,073.54	27.42	1,070.09	26.25	1,071.26	20.77	1,076.74	28.99	1,068.52	21.53	1,075.98	22.18	1,075.33	20.46	1,077.05	22.58	1074.93
MW-324	1,089.39	LIU	17.17	1,072.22	16.29	1,073.10	18.03	1,071.36	18.21	1,071.18	14.79	1,074.60	19.32	1,070.07	15.07	1,074.32	15.76	1,073.63	14.71	1,074.68	15.63	1073.76
PZ-301	1,100.07	LIU	19.91	1,080.16	18.69	1,081.38	21.12	1,078.95	20.63	1,079.44	16.59	1,083.48	21.86	1,078.21	17.45	1,082.62	18.33	1,081.74	17.03	1,083.04	18.64	1081.43
PZ-302	1,101.25	LIU	28.32	1,072.93	28.07	1,073.18	28.51	1,072.74	27.91	1,073.34	24.00	1,077.25	29.86	1,071.39	24.18	1,077.07	24.69	1,076.56	23.21	1,078.04	25.78	1075.47
PZ-303	1,098.39	LIU	25.53	1,072.86	23.66	1,074.73	25.88	1,072.51	25.23	1,073.16	21.03	1,077.36	27.40	1,070.99	21.42	1,076.97	22.00	1,076.39	20.48	1,077.91	23.12	1075.27
PZ-305	1,096.49	LIU	23.75	1,072.74	21.90	1,074.59	24.22	1,072.27	23.37	1,073.12	19.28	1,077.21	25.48	1,071.01	19.54	1,076.95	20.07	1,076.42	18.58	1,077.91	21.23	1075.26
PZ-306	1,088.35	LIU	14.93	1,073.42	14.50	1,073.85	17.07	1,071.28	16.27	1,072.08	12.91	1,075.44	16.00	1,072.35	12.98	1,075.37	13.33	1,075.02	12.73	1,075.62	13.26	1075.09
PZ-307	1,091.40	LIU	15.62	1,075.78	15.08	1,076.32	18.28	1,073.12	17.31	1,074.09	12.40	1,079.00	17.15	1,074.25	12.64	1,078.76	13.11	1,078.29	12.17	1,079.23	12.69	1078.71
Upper Sharon Unit Wells																						
MW-401	1,099.75	USU	33.00	1,066.75	33.32	1,066.43	33.39	1,066.36	32.72	1,067.03	30.63	1,069.12	31.82	1,067.93	29.65	1,070.10	29.69	1,070.06	29.38	1,070.37	29.02	1070.73
MW-402	1,089.90	USU	30.32	1,059.58	31.14	1,058.76	29.22	1,060.68	29.21	1,060.69	28.32	1,061.58	28.36	1,061.54	27.83	1,062.07	27.37	1,062.53	26.92	1,062.98	26.64	1063.26
MW-414	1,096.99	USU	24.18	1,072.81	24.11	1,072.88	25.10	1,071.89	24.76	1,072.23	22.56	1,074.43	25.04	1,071.95	22.67	1,074.32	22.88	1,074.11	22.11	1,074.88	22.42	1074.57
MW-415	1,102.25	USU	29.46	1,072.79	29.38	1,072.87	30.83	1,071.42	29.98	1,072.27	26.64	1,075.61	31.92									





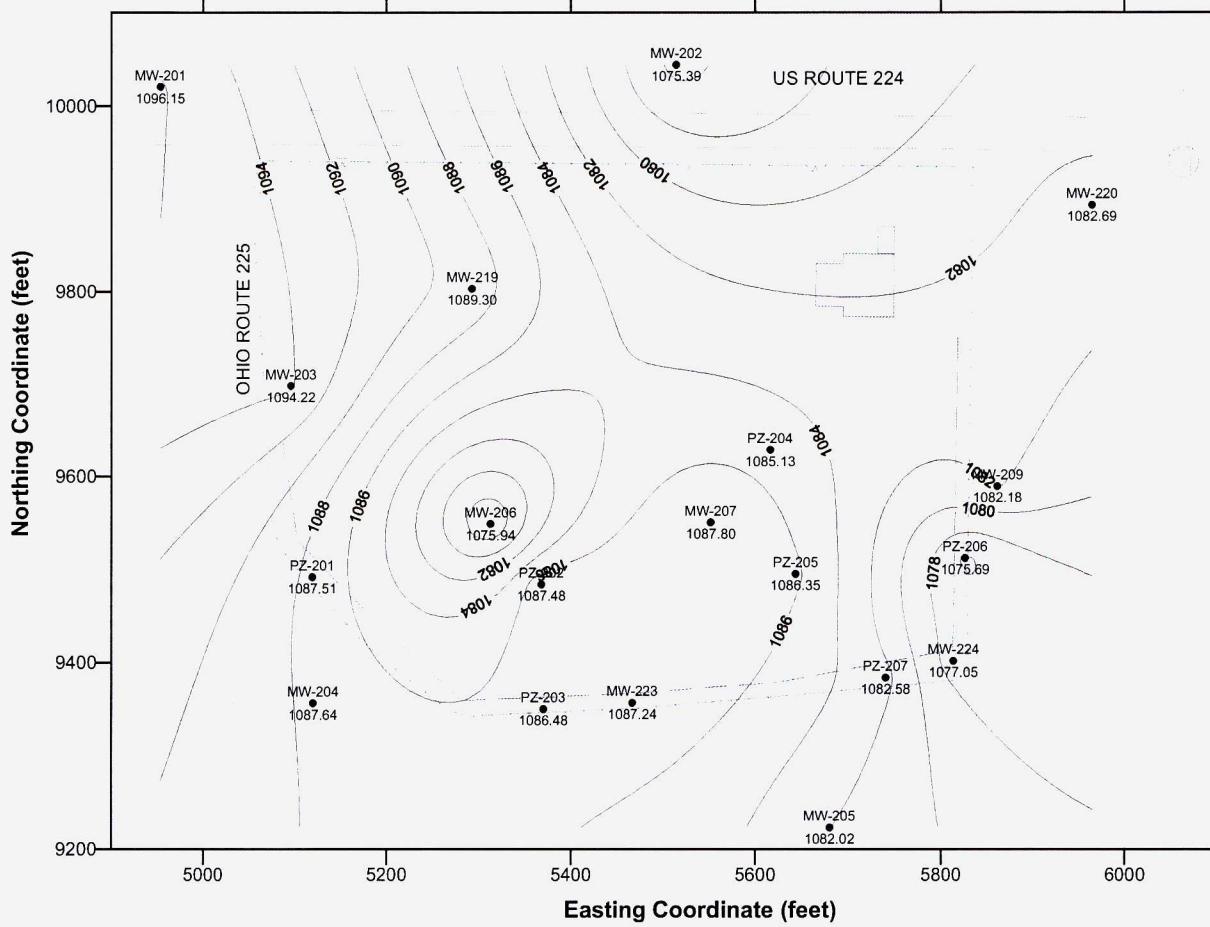
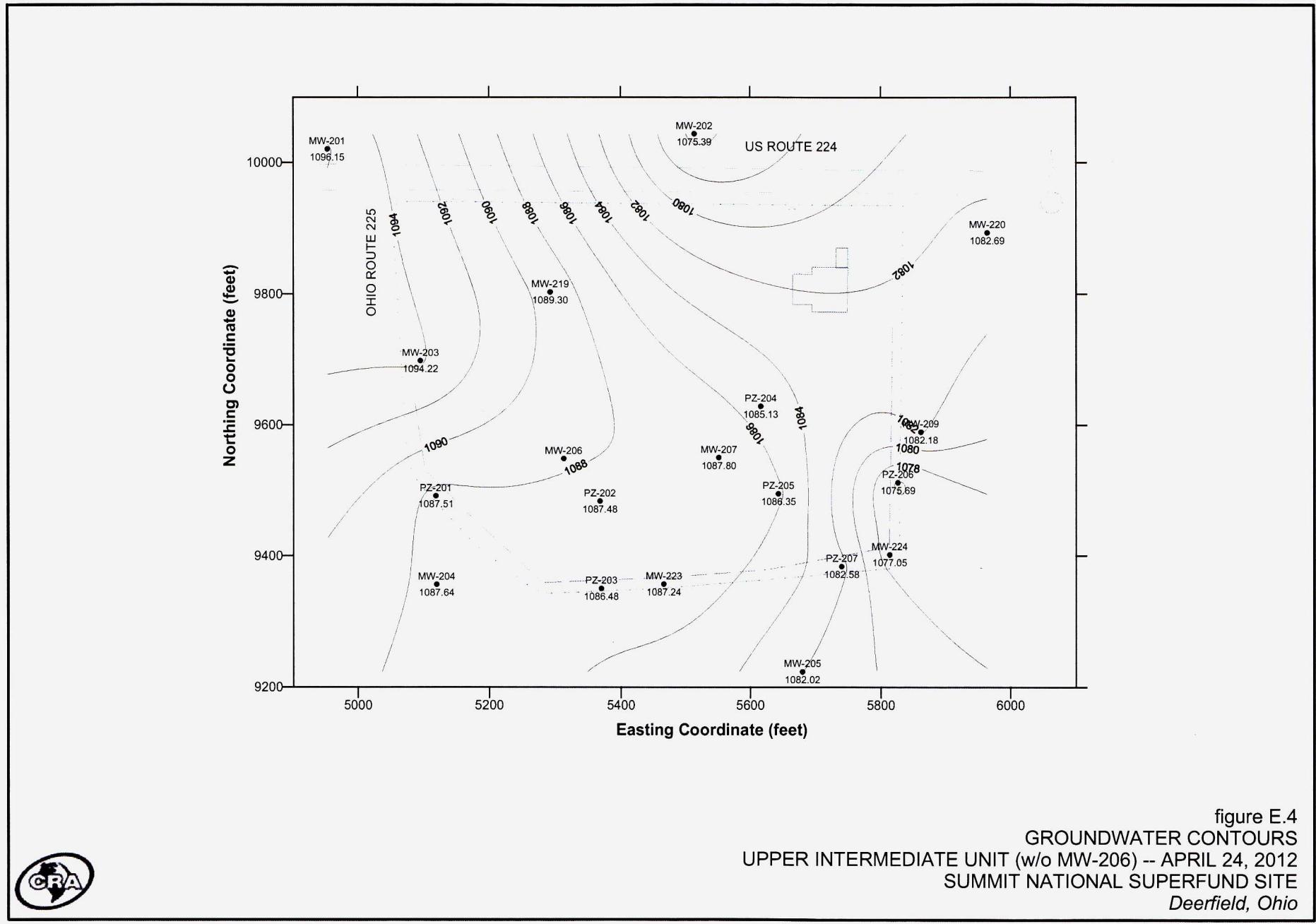


figure E.3
GROUNDWATER CONTOURS
UPPER INTERMEDIATE UNIT -- APRIL 24, 2012
SUMMIT NATIONAL SUPERFUND SITE
Deerfield, Ohio





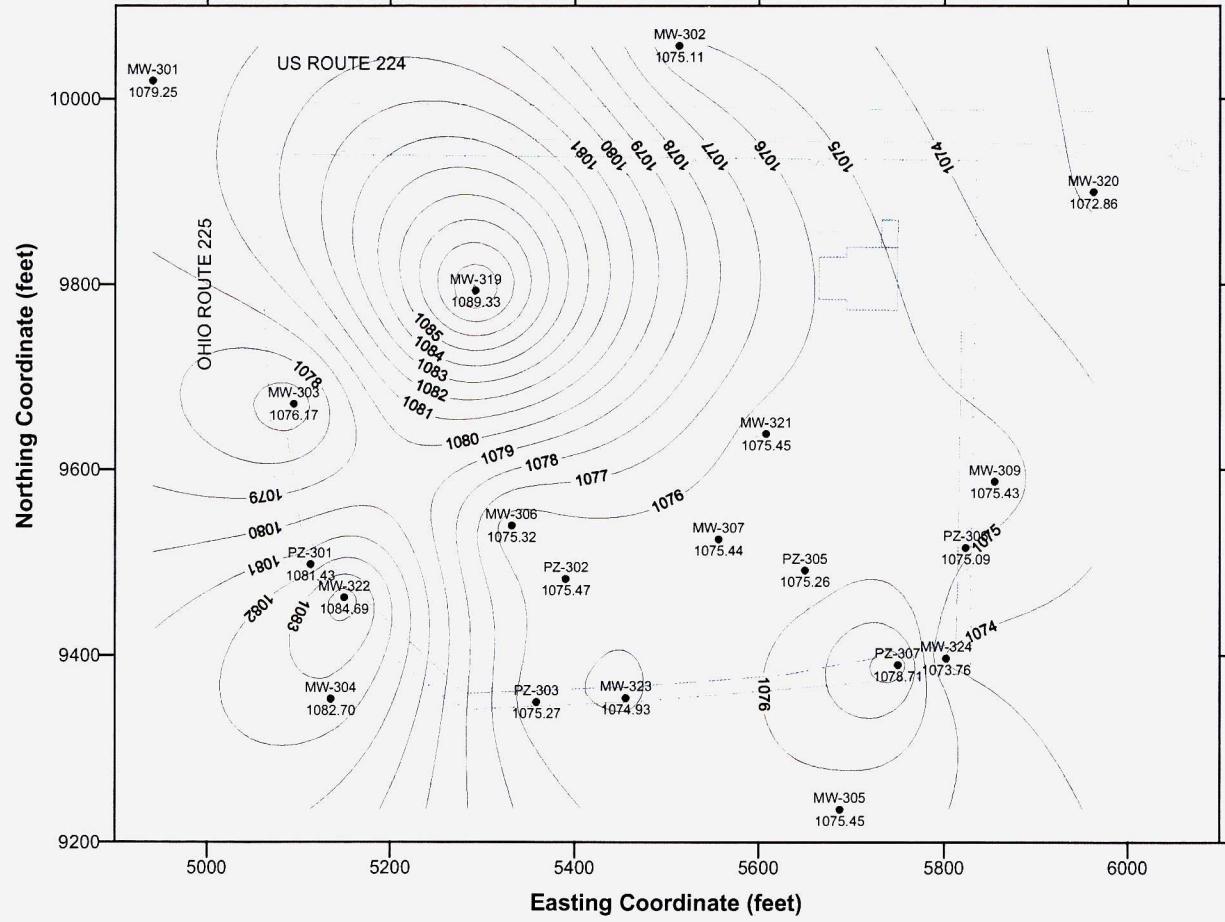


figure E.5
 GROUNDWATER CONTOURS
 LOWER INTERMEDIATE UNIT -- APRIL 24, 2011
 SUMMIT NATIONAL SUPERFUND SITE
Deerfield, Ohio



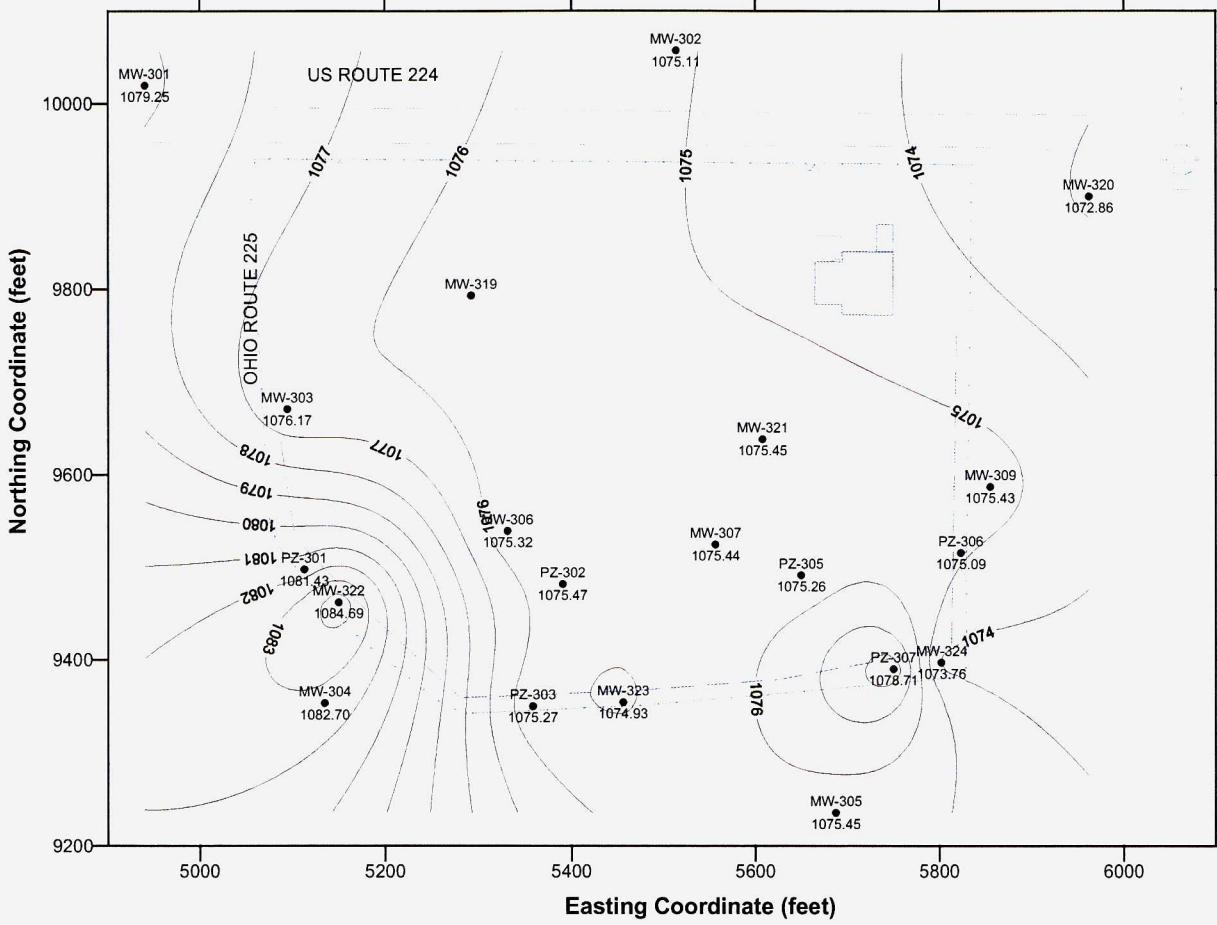


figure E.6
GROUNDWATER CONTOURS
 LOWER INTERMEDIATE UNIT - (w/o MW-319) -- APRIL 24, 2012
 SUMMIT NATIONAL SUPERFUND SITE
Deerfield, Ohio



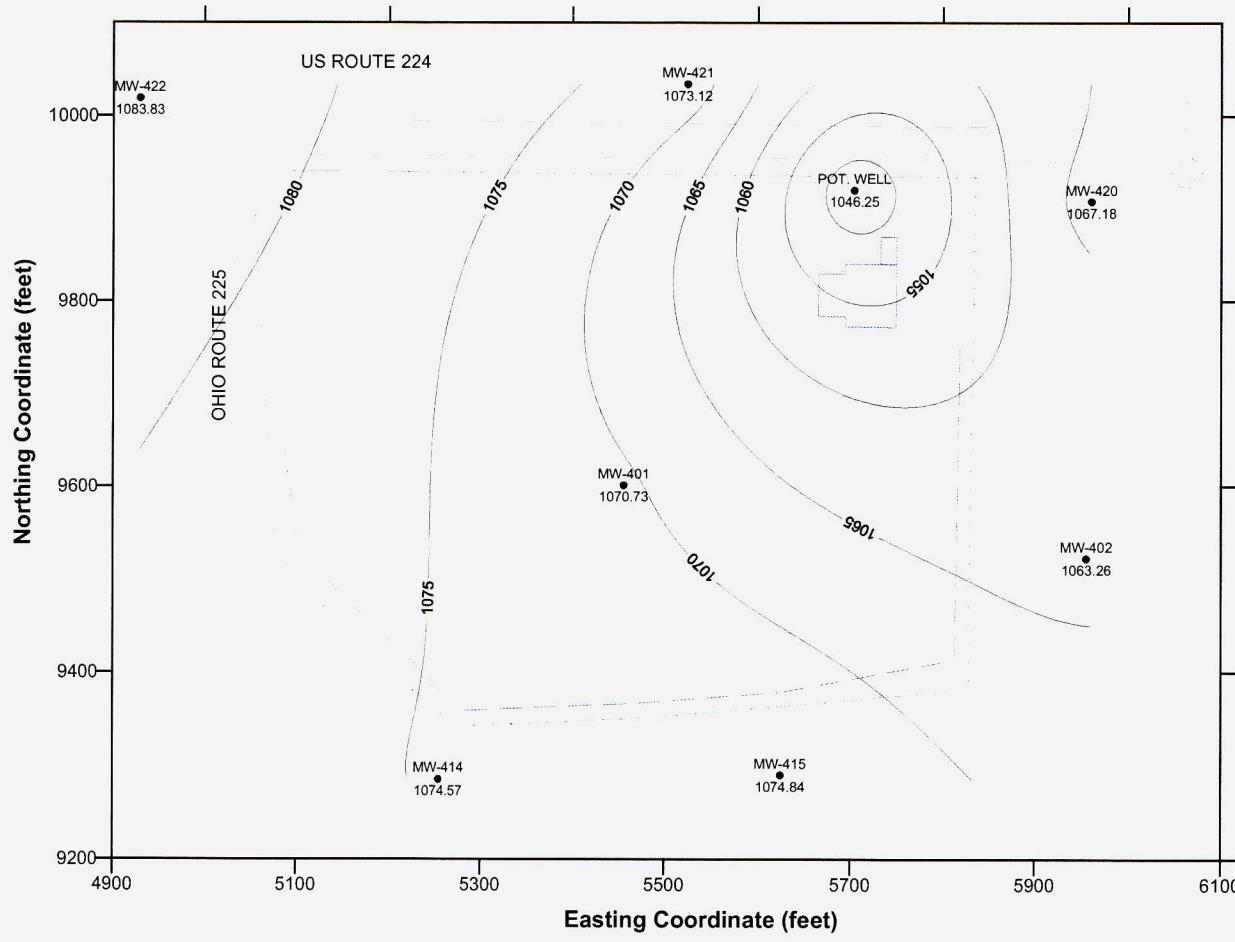


figure E.7
GROUNDWATER CONTOURS
UPPER SHARON UNIT -- APRIL 24, 2012
SUMMIT NATIONAL SUPERFUND SITE
Deerfield, Ohio



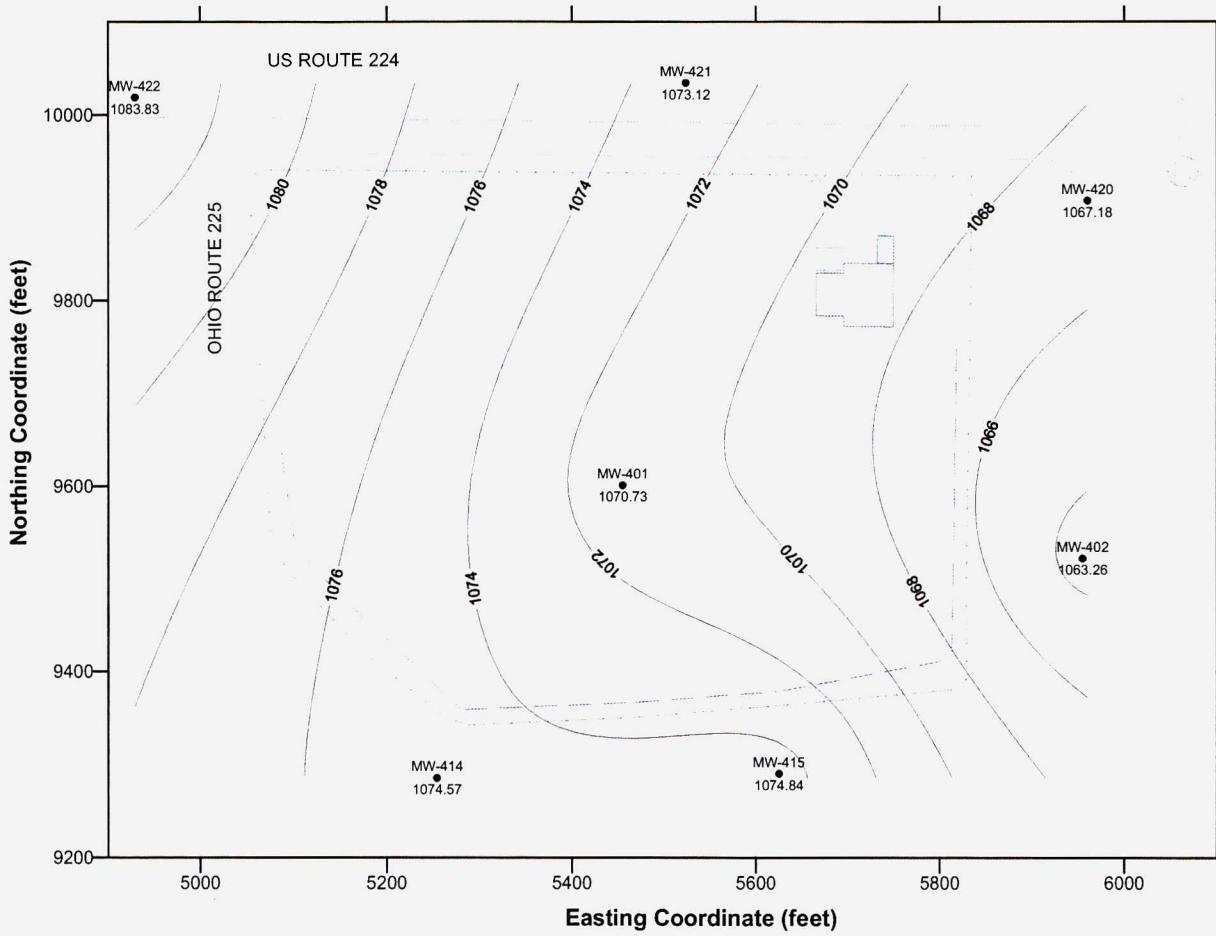


figure E.8
GROUNDWATER CONTOURS
UPPER SHARON UNIT (w/o POTABLE WELL) -- APRIL 24, 2012
SUMMIT NATIONAL SUPERFUND SITE
Deerfield, Ohio



ATTACHMENT F

SURFACE WATER AND SEDIMENT DETECTION SUMMARIES (2004-2012)

TABLE F.1

**DETECTED VOCs IN SURFACE WATER - 2004 TO 2012
CONFLUENCE OF SOUTH & EAST DRAINAGE DITCHES
SUMMIT NATIONAL SUPERFUND SITE
DEERFIELD, OHIO**

<i>Parameters</i>	<i>Sample Dates and Concentrations</i>								
	<i>October 2004</i>	<i>August 2005</i>	<i>August 2006</i>	<i>April 2007</i>	<i>April 2008</i>	<i>April 2009</i>	<i>June 2010</i>	<i>April 2011</i>	<i>April 2012</i>
Acetone	ND (10)/ND (10) *	ND (5)	ND (5)/ND (5) *	ND (5)/ND (5) *	ND (5)/ND (5) *	ND (5)	7.3/6.7 *	ND (10)/ND (10) *	ND (10)/ND (10) *
cis-1,2-Dichloroethene	ND (1)/ND (1) *	ND (1)	0.44 J/0.43 J *	0.90 J/0.88 J *	1.3/1.2 *	0.51 J	ND (1)/0.28 J *	1.2/1.1 *	1.7/1.8 *
Carbon disulfide	ND (2)/ND (2) *	0.42 J	ND (2) U/ND (2) *	ND (2)/ND (2) *	ND (2)/ND (2) *	ND (2)	ND (2)/ND (2) *	ND (2.0)/ND (2.0) *	ND (2.0)/ND (2.0) *
Trichloroethene	ND (1)/ND (1) *	ND (1)	ND (1)/ND (1) *	0.45 J/0.46 J *	0.53 J/0.49 J *	ND (1)	ND (1)/ND (1) *	0.35 J /0.33 J *	0.45 J /0.49 J *
1,1-Dichloroethane	ND (1)/ND (1) *	ND (1)	ND (1)/ND (1) *	ND (1)/ND (1) *	ND (1)/ND (1) *	ND (1)	ND (1)/ND (1) *	ND (1)/ND (1) *	0.24 J/0.25 J *
1,2-Dichloroethane	ND (1)/ND (1) *	ND (1)	ND (1)/ND (1) *	ND (1)/ND (1) *	ND (1)/ND (1) *	ND (1)	ND (1)/ND (1) *	ND (1)/ND (1) *	ND (1.0)/0.28 J *

Notes:

All measurements are in micrograms per liter ($\mu\text{g}/\text{L}$).

VOCs = Volatile organic compounds

NA = Not Analyzed

* = duplicate sample

J = Estimated concentration

U = Not present at or above the associated value

The USEPA Regional Screening Level (RSL) for acetone in tap water is 22,000 $\mu\text{g}/\text{L}$.

TABLE F.2
DETECTED COMPOUNDS
2012 SEDIMENT SAMPLE
SUMMIT NATIONAL SUPERFUND SITE
DEERFIELD, OHIO

Parameters	Sample Date / Sample ID							
	Screening Levels ¹		Mean Background ²	8/28/2011		4/24/2012		
	Resident Soil (µg/kg)	Industrial Soil (µg/kg)		Soil Concentration (µg/kg)	6029-082811-001	6029-082811-002	6029-042412-012	6029-042412-013
Volatile Organic Compounds					Duplicate		Duplicate	
Chloroform (Trichloromethane)	290	1,500	ND	1.7	1.2	ND (13)	ND (12)	
Trichloroethene	2,800	14,000	ND	ND (12)	1.5	0.68 J	ND (12)	
Semivolatile Organic Compounds								
2-Methylnaphthalene	310,000	4,100,000	972	233	224	62.0 J	63.8 J	
Benzo(a)anthracene	150	2,100	222	47.4	38.5	ND (64)	ND (60)	
Benzo(a)pyrene	15	210	161	41.9	34.1	ND (64)	ND (60)	
Benzo(b)fluoranthene	150	2,100	351	41.6	57.3	ND (64)	ND (60)	
Benzo(g,h,i)perylene	NV	NV	65	59.9	66.6	ND (64)	ND (60)	
Benzo(k)fluoranthene	1,500	21,000	351	43.1	21.2	ND (64)	ND (60)	
Chrysene	15,000	210,000	268	62.0	56.0	ND (64)	ND (60)	
Dibenzofuran	78,000	1,000,000	212	55.7	52.3	ND (130)	ND (120)	
Dimethyl phthalate	NV	NV	ND	57.0	60.6	173	ND (120)	
Fluoranthene	2,300,000	22,000,000	353	65.9	61.9	ND (64)	ND (60)	
Fluorene	2,300,000	22,000,000	9	20.7	ND (53)	ND (64)	ND (60)	
Indeno(1,2,3-cd)pyrene	150	2,100	68	34.3	32.6	ND (64)	ND (60)	
Naphthalene	3,600	18,000	859	289	208	42.1 J	44.5 J	
Phenanthrene	NV	NV	725	167	162	41.6 J	45.1 J	
Pyrene	1,700,000	17,000,000	331	90.4	85.6	ND (64)	ND (60)	
General Chemistry								
Total solids (%)	NA	NA	--	50.2	53.5	44.7	47.4	

Notes:

¹Per the USEPA Regional Screening Level (RSL) Summary Table (June 2011)

²Per Table 3-3 of the Record of Decision (USEPA, June 30, 1988)

µg/kg = micrograms per kilogram

NV = No Value

NA = Not Applicable

ND = Not Detected

ND () = Not Detected at or above the value in parentheses